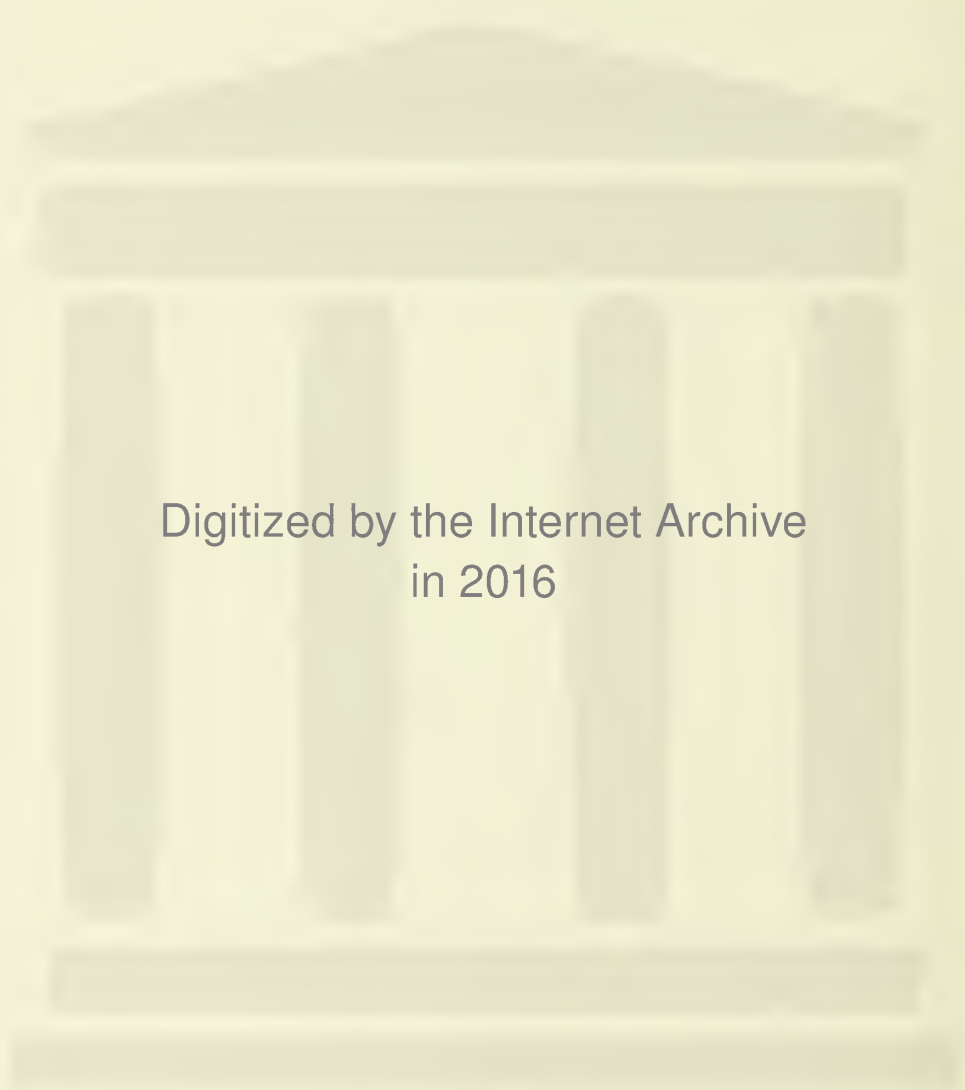




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# *The Journal of The* **SOUTH CAROLINA** *Medical Association*

*Delivery After Difficult Parturition*

*Trends in Obstetrics*

*Pseudo-Meigs Syndrome*

*Paralysis Agitans*

*Kanasii*

*Greenville County History*

*Medical College Clinics*



VOLUME 57

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NUMBER 1

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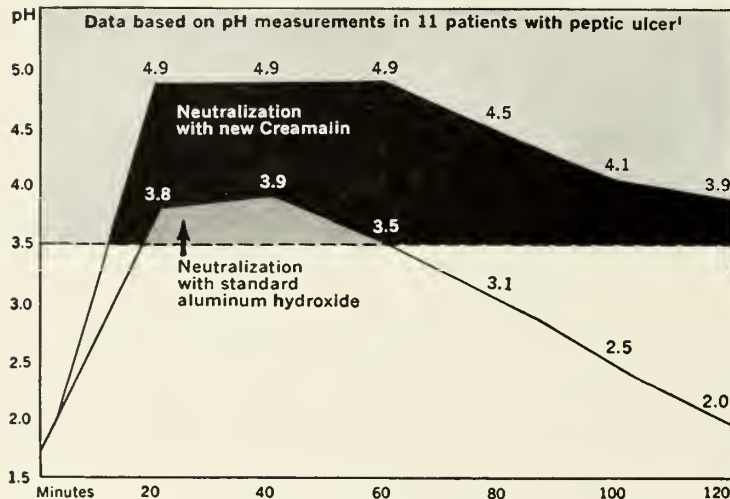
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1. Data in the files of the Department of Medical Research, Winthrop Laboratories. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A.* (Scient. Ed.) 48:384, July, 1959.

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# The Journal

of the

## South Carolina Medical Association

VOLUME 57

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NUMBER 1

### DELIVERY SUBSEQUENT TO DIFFICULT PARTURITION

R. A. COSGROVE, M. D.

*The Margaret Hague Maternity Hospital*

*Jersey City, N. J.*

It is common experience to note the multiparous woman regarded as little if any problem in relation to possible dystocia. This is true even though it is well known that many other complications increase with parity.

A study was conducted to review the subsequent deliveries of women who were subjected to mid-forceps delivery to terminate their initial parturition in a hospital where forceps are rigidly controlled. This series therefore includes almost all of the vaginal deliveries that were difficult of termination, since by the standards used in the Margaret Hague Maternity Hospital, lesser degrees of forceps application (either low or outlet forceps or both), are almost all elective or for other indications than fetopelvic arrest.

In addition to the mid-forceps deliveries with subsequent delivery, data concerning delivery subsequent to cesarean section has also been included because of some variation in the management of such cases throughout the country.

Table 1 indicates that there was no great difficulty in delivery subsequent to the initial parturition, the one instance of cesarean section not being related to the problem. It is also shown that difference in infant weight posed no significant problem. Most of these women had initial rapid labors and required mid-forceps procedures to resolve second stage positional problems such as deep transverse mid-pelvic arrests.

Table 1

Delivery after mid forceps operations due to dystocia, with termination after 4-12 hours of labor.

Spontaneous delivery 13

Subsequent infant weight:

Greater than first baby 8

Less than first baby 3

Unknown 3

Low forceps delivery 7

Subsequent infant weight:

Greater than first baby 4

Less than first baby 3

Cesarean section (for placenta previa) 1

Table 2

Delivery after mid forceps operations due to dystocia, with termination after 13-14 hours of labor.

Spontaneous delivery 46

Subsequent infant weight:

Greater than first baby 20

Less than first baby 22

Unknown 6

Low forceps delivery 16

Subsequent infant weight:

Greater than first baby 8

Less than first baby 8

Mid forceps delivery 5

Subsequent infant weight:

Greater than first baby 4

Unknown 1

Cesarean section 2

Subsequent infant weight:

Greater than first baby 1

Less than first baby 1

Breech delivery by vagina 2

Subsequent infant weight:

Less than first baby 1

Unknown 1

Table 2 indicates the experience when the initial labor was 13-24 hours in length. The longer initial labor appears to increase the chance of difficulty in the subsequent delivery, particularly when 4 of 5 of the subsequent mid-forceps and 1 of the 2 cesarean sections resulted in infants larger than those initially delivered.

We do not feel ashamed of performing cesarean sections in multiparous women for disproportion, for some of our most tragic experiences have occurred when we assumed a woman could deliver through the vagina simply because she had done so at least once before. If it is not early recognized that such problems can occur in such women, they will be allowed to labor overlong with unfortunate results both to her and to her infant. It is much better to perform a cesarean section relatively early on such women than to deliver eventually through the vagina a child who dies neonatally from cerebral trauma or who lives with cerebral damage.

Table 3

Delivery after mid forceps operations due to dystocia, with termination after 25-36 hours of labor.		
Spontaneous delivery 17		
Subsequent infant weight:		
Greater than first baby	5	
Less than first baby	6	
Unknown	6	
Low forceps 4		
Subsequent infant weight:		
Less than first baby	4	
Mid forceps 7		
Subsequent infant weight		
More than first baby	4	
Less than first baby	2	
Unknown	1	

Table 3 indicates an increasing degree of difficulty in subsequent termination when initial labor was 25-36 hours. 25% of this small group required another mid-forceps operation for successful termination. It is noted that generally these latter babies were heavier than the initial babies.

Table 4 shows the experience when the initial labor was more than 36 hours.

While the figures are insufficient for any real statistical analysis, it is obvious that less than all of them deliver without difficulty.

Table 4

Delivery after mid forceps operations due to dystocia, with termination after more than 36 hours of labor.		
Spontaneous delivery 13		
Subsequent infant weight:		
Greater than first baby	3	
Less than first baby	7	
Unknown	3	
Low forceps 5		
Subsequent infant weight:		
Greater than first baby	3	
Less than first baby	2	
Mid forceps 4		
Subsequent infant weight:		
Greater than first baby	2	
Less than first baby	2	
Cesarean section 1		
Subsequent infant weight:		
Greater than first baby	1	

Table 5

Spontaneous delivery		
89 cases	64.5%	
	Subsequent infants larger	36
	Subsequent infants smaller	38
Low forceps		
32	23.5%	
	Subsequent infants larger	15
	Subsequent infants smaller	17
Mid forceps		
16	11.5%	
	Subsequent infants larger	10
	Subsequent infants smaller	4
Cesarean section		
1	0.5%	
	Subsequent infant larger	1
(Breeches and cesarean section for placenta previa excluded.).		

In summary, table 5 indicates the composite data for deliveries subsequent to termination by mid-forceps for dystocia. Twelve per cent of the cases required operative delivery of greater difficulty than low forceps for successful termination.

Table 6

Delivery subsequent to mid forceps delivery for indication other than dystocia. (fetal distress, abruption, inertia, teaching, for termination of the second stage (elective?), etc.)	
Total cases 32	
Spontaneous delivery	20
Low forceps	6
Mid forceps	1
Breech	4
Cesarean section (for fetal distress)	1



In addition to dystocia, several other indications for mid-forceps are commonly recognized. Table 6 indicates the experience following initial delivery for such other indications. The cesarean section was not related to the mode of prior delivery.

No apologies are made for the small numbers, for mid-forceps procedures when legitimately performed are usually not over 5% (and generally less) of total delivery procedures.

Table 7

Delivery after cesarean section for fetopelvic disproportion (and inertia?)

Spontaneous delivery	71
Low forceps	42
Mid forceps (!)	9
Breech	4
Cesarean section	300

70% cesarean section

The policy at the Margaret Hague Maternity Hospital is to allow women to deliver by the vaginal route if a subsequent labor indicates that they may reasonably be expected to do so. It is recognized that this policy is not readily transferable to all hospitals, and if constant surveillance, adequate blood supplies, and immediate access to operating rooms are impossible, such trial labors may be disastrous.

Nevertheless, despite a cautious attitude and a readiness to re-operate if subsequent labor shows any lack of substantial progress, between 35 to 50% of prior cesarean sections are delivered vaginally each year. This occurs despite a cesarean section rate of less than 4%, and although outside the scope of this paper, raises some doubt of the necessity of many of the primary cesarean sections. In the particular group in which the indication was dystocia, 70% were subsequently re-sectioned. Mid forceps operations were performed 9 times, but it is very questionable if it is legitimate to allow a woman who has had a cesarean section for dystocia to become a

Table 8

Spontaneous delivery	68
Low forceps	24
Mid forceps	4
Cesarean section	21

18% cesarean section

candidate for a major vaginal operation for delivery. In retrospect it is believed such cases should have been delivered by repeat cesarean section.

In contrast to the preceding table, number 8 reveals the results of subsequent pregnancies when the indication for the initial cesarean section was for a situation other than disproportion (or inertia).

These indications include placenta previa, toxemia, abruption of the placenta, obstructing tumors and a few scattered instances of infrequent indications such as prior vaginal or cervical surgery, anomalies, etc.

Furthermore, about 20% of the cases in this group had had vaginal deliveries prior to their initial cesarean section.

It is therefore not surprising that there is only 18% subsequent cesarean sections in this group. It is also obvious that the indication for the cesarean section in many instances is generally of a non-recurring nature.

Table 9

	Prior mid forceps for disproportion		Prior cesarean sections	
Spontaneous delivery	64.5%		17%	
Low forceps	23.5%		10%	
Mid forceps	11.5%		2%	
Cesarean Sections	0.5%	12%	70%	72%
For other indications				
Spontaneous delivery	62%		58%	
Low forceps	18%		15%	
Mid forceps	3%		2%	
Cesarean section	0%	3%	18%	20%
(breeches not included)				

The final table is arranged to indicate certain pertinent data.

Women who have had mid-forceps deliveries for dystocia with their first pregnancies will have trouble necessitating mid-forceps or cesarean section in 12% of their subsequent pregnancies.

If they have had a cesarean section to terminate their initial pregnancy they will require a major procedure for termination of the pregnancy in 72% of their subsequent pregnancies.

In women on whom an initial mid-forceps operation was performed for an indication other than dystocia, subsequent difficulty will be encountered in 3% of cases. When a pre-

vious pregnancy was terminated by cesarean section for an indication other than disproportion, difficulty can be expected in 20% of cases.

#### *Summary*

Vaginal delivery does not ensure uncomplicated subsequent delivery.

An exact knowledge of prior deliveries will prevent overconfidence and avoid the maternal

and fetal loss which occurs when it is assumed that multiparas will always deliver vaginally without trouble.

Certain cases of previous cesarean section may be delivered vaginally under specified rigid conditions.

Dr. Owens S. Weaver, of Wilmington, Delaware, helped compile much of the data on mid-forceps operations.

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## TRENDS IN OBSTETRICS

HARRY PRYSTOWSKY, M. D.

*Department of Obstetrics and Gynecology,  
University of Florida College of Medicine,  
Gainesville, Florida*

To those of us who had the honor of knowing Doctor Horace Smithy and whose privilege it was to count him as a close friend, the Medical College of the State of South Carolina is hallowed ground. To be allowed to take part in this program, dedicated to the memory of this great worthy of the past, is an inspiring experience and will always be a treasured memory.

Although the 20th century has passed its midpoint by only a few years, the main contributions of the first half of our century to obstetrics are clear. They comprised the conquest in goodly measure, of the maternal complications of pregnancy, labor and the puerperium. Throughout the greater part of that era, puerperal infection, eclampsia and hemorrhage, aided and abetted by the often deadly operation of cesarean section, were constant threats and carried away hundreds of thousands of our mothers. With the life of the mother so often in the balance, it is understandable that the chief objective both of clinical practice and research was her welfare and her survival, so that other considerations were of relatively minor importance. If babies were lost, as they were rather frequently, from high forceps or from version and extraction through a contracted pelvis, or from various and sundry other cases, these infant deaths, although naturally considered regrettable, were looked upon as small tolls to

pay in obstetric regimens directed chiefly at maternal salvage. Certainly, in the field of research throughout most of that period, the fetus and newborn elicited little interest.

Thanks to various factors, with which you are as well acquainted as I, recent years have witnessed a decline in maternal mortality in the United States which constitutes one of the transcendent achievements of modern medicine. Whereas, in 1910, let us say, one expectant mother in every 150 died before the process of childbearing was over, in 1950, only one mother in approximately 2,000 died in association with childbearing. Even in our larger clinics, a young man today usually goes through his entire 3 or 4 years of resident training without seeing a single death from puerperal infection, or from eclampsia and, quite possibly, not even a single death from hemorrhage. With full realization that many maternal complications of childbearing, especially the toxemias, still await solution, it is nevertheless true that the loss of a mother in obstetric practice today has become a relatively rare event; and, as an outgrowth of this circumstance, obstetricians, now released in large measure from their earlier concern over maternal survival, are directing their attention more and more to fetal welfare. Certainly, if the first half of the century was concerned chiefly with the hazards which threatened the mother, all portents indicate that obstetric re-



search, as well as practice, in the second half of the century will be centered on the vicissitudes of fetal life.

Now what do I refer to when I speak of the "vicissitudes of fetal life"? Year in and year out, about 150,000 potential American citizens are either born dead or die shortly after birth, so-called "perinatal deaths". These 150,000 perinatal deaths constitute about 10% of all deaths occurring in this country at all ages and from all causes. About half of them occur as the result of premature birth. An even greater source of fetal wastage is abortion, for it is estimated on sound grounds that at least 10% of all pregnancies terminate spontaneously as abortions. This means that over 400,000 abortions take place in the United States every year. Careful examination of the tissues passed in these abortions shows beyond question that the majority are due to gross malformations, either of the fetus or of the surrounding membranes. Thus, in many cases there is no fetus at all, while in other, microscopic examination reveals such defective development of the vital organs (such as absence of the heart), as to make survival quite impossible. In other words, for the most part, abortion is simply nature's way of getting rid of a grossly defective product of conception. Finally, in discussing these 400,000 spontaneous abortions which occur annually in this country, let it be clearly understood that I am leaving out of consideration entirely the half million and more pregnancies which are terminated each year through criminal abortion.

But there is an even greater tragedy perhaps than the actual death of a new born infant or the loss of a pregnancy through abortion. That is the birth of a baby whose brain never develops, who continues, like a vegetable, to grow and develop physically, but who lacks the cerebral centers which govern speech, muscular coordination and reason. The frequency of this tragic condition, cerebral palsy, is much greater than ordinarily realized because such children are rarely seen, for they have to be kept in institutions behind locked doors. Their total number in this country has been estimated to be in excess of 300,000—a source of daily heartache to more than half a

million parents scattered throughout our land.

Accordingly, it can be said without exaggeration that the outlook for the fetus in any given pregnancy is a hundred times more precarious than that of the mother. Let this fact be emphasized because it is this tenuous hold which the fetus has on life and the sundry vicissitudes to which it is heir that give obstetrics its broad scope, its color and fascination.

This interest in fetal outlook, has developed rapidly in the last few years and has brought forth a number of very important trends. And there are two or three of these that I should like to emphasize.

Perhaps the most noteworthy of these, in my humble opinion, is the growing concern over the long-term role played by sublethal fetal injuries in producing neuropsychiatric impairment of the child. The area encompassed by this problem runs almost the whole gamut of obstetrics, since there is scarcely a complication of pregnancy or labor which does not have some relationship to fetal prognosis. But at many points, the fields involved in this area of investigation extend far beyond strict obstetric knowledge. They involve, in fact, most of the basic sciences, including endocrinology, embryology, genetics, teratology, biochemistry, virology, and pathology. It is becoming essential therefore, in most studies of fetal environment, to enlist the active collaboration of an exponent of one or another of these basic sciences, a trend that is understandable and growing.

It is hazardous to forecast which of these sciences will contribute most to obstetrical research; in the opinion of many it seems logical to give this place to endocrinology. It seems *probable* that aberrations of endocrine function are responsible for most spontaneous abortions and for most premature labors. In regard to the etiology of hypertension with convulsions, the opinion is growing that this age-old enigma of obstetrics may be solved before long on the basis of disordered function of three structures—all endocrine organs. As for the importance of teratology, congenital malformations now account for 14% of all infant deaths in the United States. To what extent genetic factors, virus infections, and

conditions associated with oxygen lack enter into the etiology of these malformations is a growing and promising field of research.

Another trend in obstetric research is the greater use of the rhesus macaque monkey. There is a 44-acre tropical island off the eastern coast of Puerto Rico where a colony of monkeys, living under natural conditions, is being developed. The colony now numbers 350 monkeys and an eventual population of a thousand or so is planned. These monkeys will be used in the National Institute for Neurological Diseases and Blindness for observational and experimental research in reproduction. It is planned indeed to maintain a sort of lying-in hospital, much like a human maternity clinic, but where the various types of experimentally inflicted intrauterine injury can be studied in respect to the subsequent behavior of the infant. Already convulsions and muscular incoordination in the new-born and growing infant have been produced; frequent tests are being made on the 55 monkey infants already born during the past year in this "maternity home" and extensive psychological and neurological studies of these infants are scheduled for the future. It would seem apparent that much of the information thus gained will be applicable to certain neuropsychiatric disorders in human infants.

The last part of this presentation has been prepared so that you may have at hand a preliminary record of the activities and some of the accomplishments of my colleagues and myself during our recent visit to Peru. The expedition was made possible by a Macy Foundation Grant to Yale, Johns Hopkins, Florida, Harvard, and Boston Universities.

The mammalian fetus obtains oxygen for its growth and maintenance from the maternal uterine circulation through its own umbilical circulation. The characteristics of the maternal and fetal bloods with regard to their oxygen contents and capacities have been shown to vary during pregnancy in several species and to vary between several different species. Furthermore, an oxygen pressure gradient between maternal uterine and fetal umbilical blood have been demonstrated in the sheep,

the human, and the rabbit. Of these three species the barrier to oxygen transfer appears to be greatest in the sheep, where Professor Barron has estimated its magnitude at 40 mm. of mercury. Under conditions of poor oxygenation of maternal blood it might be expected on these grounds that fetal oxygenation would suffer. Yet sheep live and breed successfully at altitudes above 12,000 feet. This study was undertaken to investigate the modifications, if any, in the maternal uterine and fetal umbilical circulations which occur at high altitudes.

When compared with sea level observations, maternal blood has a higher oxygen capacity in the sheep at high altitude. The oxygen capacity of the animals at Morococha averaged 16.5 vols. per cent while sea level observations have averaged 13.8 vols. per cent. This difference is statistically highly significant at all stages of pregnancy.

Fetal blood increases in oxygen capacity as pregnancy advances. At all periods after 90 days the oxygen capacity of fetal blood is greater at altitude than at sea level. This difference is again highly significant. Thus, fetal as well as maternal polycythemia is demonstrated.

Maternal arterial blood is 92 per cent saturated with oxygen at sea level and only 69 per cent at Morococha, a highly significant difference. Maternal blood *leaving* the uterus becomes less well oxygenated as pregnancy advances, that is, more oxygen is extracted from the maternal blood at term than earlier, but this decline in saturation is less at high altitude. In other words, uterine venous oxygenation declines less at high altitude than in the sea level animal toward the end of pregnancy. And although the average oxygen saturation *throughout* pregnancy of uterine venous blood is significantly less at high altitude than at sea level, this difference becomes insignificant in the last 20 days of pregnancy.

The oxygen saturation of both umbilical arterial and umbilical venous bloods decrease as pregnancy advances past 90 days. They are both significantly less at term than at 100 days, and there is no significant difference between the high altitude and sea level fetuses.

There appears to be no difference in the

position or shape of the oxygen dissociation curves of either fetal or maternal blood when high altitude findings are compared with sea level data. Thus it is possible to convert the saturations to the partial pressures. In the last 20 days of pregnancy the oxygen tension in blood returning to the fetus from the placenta is virtually identical with its sea level value in the same channel. This blood running in the umbilical vein is arterial blood of the fetus, the highest in oxygen content of his blood. Thus, despite a decline in maternal arterial  $pO_2$  from 80 to 39 mm. of mercury which results from the ascent to high altitude, the fetal arterial oxygen pressure is unchanged from its sea level values.

The average partial pressure of oxygen in maternal blood supplying the uterus has been calculated at sea level and at altitude. This mean value of  $pO_2$  in uterine blood in the sea level series is 51 mm. of mercury and in the high altitude mother, is 36 mm. Hg. The mean value for  $pO_2$  in fetal umbilical blood has been similarly obtained, and a value of 15 mm. in the Morococha fetus compares with one of 16 in the fetus at sea level. The difference between these mean values of maternal and fetal  $pO_2$  is presented as the maternal—fetal oxygen pressure gradient for each series.

As the oxygen consumption of the uterus and its contents is the same per unit mass at sea level and at altitude, the lower pressure gradient across the placenta suggests that the resistance to the movement of gas between the two bloods is reduced, probably by an increase in the diffusion surface between them. The suggestion that it is increased at altitude gains

support from observations on the circulating blood volume of the fetus (16.1 to 29.0% of the body weight) and from the weights of the placenta (an increase in both the number and the combined weight of the cotyledons at altitude when compared with sea level).

Finally, a word about uterine blood flow—statistical comparison shows the rates of uterine blood flow at high altitude are significantly greater than those at sea level. We have been able to conclude, therefore, that a part of the long term adaptation of the fetal environment to life at high altitude is an increase of the rate of flow of maternal blood through the uterus.

It thus appears that the ewe at high altitude has been able to maintain the partial pressure of oxygen in fetal blood at sea level values. This has been accomplished by a series of adjustments in the oxygen-carrying quality of maternal and fetal blood and by a change in the efficiency of oxygen transfer within the uterus. With the sea level gradient, fetal oxygenation could not be maintained at high altitude. By changing the surface area of the placental membrane or by alterations in distribution of maternal blood within the uterus, or by both, fetal oxygenation at high altitude is maintained.

In conclusion, it is my feeling that if those concerned with obstetrics and gynecology do not take steps to study and meet our problems, and if our newborns in the future are hereby neglected, their neglect tomorrow will be the direct result of the apathy and negligence of today.

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#### ERRATUM

In the article by Dr. Charles R. Holmes in the December issue of *The Journal* (Vol. LVI, No. 12, p. 509) an error was made in attaching the proper legends to the two cuts which appeared. The legends as printed should be reversed.



# THE PSEUDO-MEIGS SYNDROME

## REPORT OF A CASE

ALI T. ARBAN, M. D.

*Dept. of Gynecology and Obstetrics,*

*Central Baptist Hospital, Lexington, Ky.*

The pseudo-Meigs Syndrome<sup>7, 8</sup> refers to the association of hydrothorax and ascites with a pelvic or abdominal neoplasm, excluding fibrous tumors of the ovary (fibroma, thecoma, Brenner and granulosa cell tumors) which are the exclusive province of the true Meigs syndrome. The disappearance of the fluid following the extirpation of the ovarian neoplasm is the mutual character of both syndromes. The difference between this simulating syndrome and the original lies in the complete curability of the latter.<sup>8</sup> The utmost rarity of these syndromes will be sufficiently understood by stating that Meigs was able to collect only 84 true cases and 40 simulating cases in the literature by 1954.<sup>9</sup> Since then some few cases have been reported.<sup>4, 6, 12</sup>

Despite the obscurity of the origin of the fluids,<sup>8</sup> which are similar in both cavities;<sup>9</sup> their transportation in either direction has been definitely demonstrated.<sup>1, 2, 10</sup>

Since the aim of this paper is only to report a case fulfilling the above criteria, to re-emphasizing the original concepts and state the known facts briefly, it is suggested that for further details regarding the rationale and arguments for and against the various theories reported the papers of Meigs,<sup>8, 9</sup> Rowlands *et al*,<sup>13</sup> MeLeod,<sup>6</sup> and Novak<sup>11</sup> be reviewed. The following case is reported for statistical value.

### *Case report*

Mrs. M. B. white, aged 40 years, nulliparous, was admitted to the hospital on July 21, 1959 with complaints of abdominal swelling, dyspnea and irregular periods. It is interesting that this patient was examined in October of 1958 by her family physician; no pathologic changes could be found in the pelvis or anywhere else. About three months ago, she started to have irregular menses at 2 weeks intervals of 7 days' flow. Six weeks ago, she noticed a swelling in the lower part of the abdomen which increased very rapidly in the next two weeks. Pregnancy test was

negative. There was no loss of weight. Also three weeks prior the admission, she developed shortness of breath.

Past history was noncontributory. The family history was rather suggestive, supplying 3 cases of cancer in her immediate family.

On admission, the abnormal physical findings were found to be limited to the chest, abdomen and pelvis. There was clinical and radiologic evidence of massive pleural effusion on the right side. Besides this, the abdomen was obviously swollen. A large mobile mass was palpable which seemed to arise from the pelvis, extending to the right flank. The abdomen also exhibited definite signs of fluctuation associated with shifting dullness. Vaginal examination disclosed a normal sized retro-verted uterus. There was suggestion of nodularity in the cul de sac with a large cystic mass in the right adnexa extending almost to the umbilicus. Except for 9.6 Gm. of hemoglobin laboratory findings were in normal limits.

The ensuing day, upon entering the peritoneal cavity, a straw colored fluid immediately came into the wound, which was sucked off, amounting within the neighborhood of 5000 ml. Then a huge (6x7x7 inches in diameter) ovarian cyst which was very ragged and vascular looking, lying in the right side of the pelvis and overlying the fundus and the anterior wall of the rectum, was seen. The multiple adhesions between the cyst and its neighboring structures were separated with blunt dissection. The tumor mass was removed as intact as possible. The specimen was given to the pathologist who advised that the other adnexa and uterus in toto be removed, because of the malignant appearance of the mass. The operation proceeded in the suggested manner.

Pathologic diagnoses were as follows: 1. Papillary adenocarcinoma of right ovary with spread to surface of uterus. 2. Chronic cervicitis.

Cytologic examination of ovarian fluid showed malignant epithelial cells.

During the immediate postoperative course 500 ml. of blood were given and an additional 1000 ml. of blood were transfused within the next 48 hours.

On the 5th postoperative day, a chest film showed a considerable diminution in the amount of free fluid in the right pleural sac when compared with the film taken on July 21, 1959. On the following day, 850 ml. of fluid, straw colored at first and blood tinged at last were drawn off by thoracentesis through the 9th interspace, postero-lateral. The patient immediately experienced a great deal of relief in breath-



Figure 1

On admission: roentgenogram of chest showing opacity of right side of chest due to fluid.

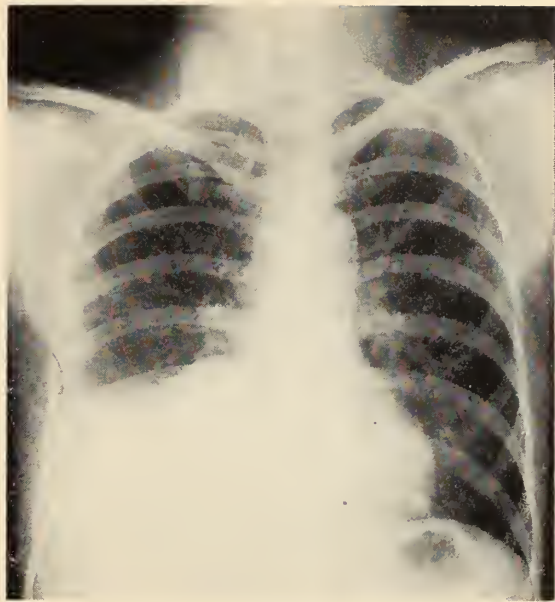


Figure 2

Day before thoracentesis (5th postoperative day) Considerable diminution in the amount of free fluid in the right pleural sac.—At least 2 interspaces.

ing. "I can breathe deeper now." Cytologic examination of the pleural fluid disclosed a large number of carcinoma cells plus inflammatory exudate. The third chest film, taken on the 7th postoperative day, showed appreciable decrease in the amount of free fluid.

The patient made an uninterrupted recovery from the operation and was discharged from the hospital on the 9th postoperative day in good condition with a weight loss of 22 lb. Her health was perfectly restored soon afterwards and has continued since uninterrupted. When last seen on Dec. 28, 1959; she was symptom-free and had also gained 10 lb. since discharge.

### Discussion

In this case, since the disappearance of hydrothorax no cancer activities have been shown in meticulous follow-ups. It seems that the appearance of free cancer cells in pleural effusion is not necessarily the sign of metastatic carcinoma, but in some cases it is only nature's demonstration of peritoneo-pleural transfer. Therefore, if we catch them before their implantation into the serosa, we will be able to prevent their growth as solid metastatic tumors or at least slow down the speed of metastatic spread. This possibility indirectly was shown in 1950 by Goldie *et al*<sup>3</sup> "A single intra peritoneal injection of radio-gold into mice induced disappearance of abundant exu-

date and of its free tumor cells also prevented their metastatic implantation."

Meigs' epoch-making contribution seemingly works well beyond its earlier limitation by showing a sharp decrease in the number of tumor cells available for implantation because



Figure 3

Day after thoracentesis; appreciable re-expansion of lung following aspiration of 850 ml. of fluid.



of the mysterious disappearance of the fluid which carries cancer cells.

#### Summary

1. A case of papillary adenocarcinoma of the ovary qualifying as pseudo-Meigs' syndrome has been reported.
2. Because of the possibility of favorable prog-

nostic effect, even in malignant cases, early removal of the ovarian neoplasm is emphatically urged.

#### Acknowledgment

The case was made available through the kindness of Dr. Larsen. The author is also indebted to Dr. Gierlach, Radiologist, for photographs and to Dr. Chipps, Pathologist for his excellent evaluation of the specimens.

#### REFERENCES

1. Cowan, I. I., Cron, R. S., Burgess, G. F., Karioris, F. G.: Transport of radioactive colloidal gold between serous cavities. *Surg. Gynec. & Obst.* 98: 721, 1954.
2. Cowan, I. I., Karioris, F. G.: Prophylaxis and palliation of malignant effusions with radioactive colloidal gold. *Am. J. Obst. & Gynec.* 69:312, 1955.
3. Goldie, H., Ellington, A. L., and Geiger, G. L.: Combined treatment of intraperitoneal tumor growth with radioactive chromic phosphate ( $\text{CrP}^{32}\text{O}_4$ ) and chemotherapeutic agents. *Proc. Am. A. Cancer Res.* 2:206, 1957.
4. Gould, E. A., Kerr, H. H.: Meigs' syndrome. *Ann. Surg.* 143:740, 1956.
5. Knuth, W. P., Walske, B. R.: Malignant ovarian tumor with ascites and hydrothorax simulating Meigs' syndrome. *Am. J. Surg.* 95:480, 1958.
6. MacLeod, D. H., Read, C. D.: *Gynecology*. 5th edition. London, J. & A. Churchill, 1955. p. 640.
7. Meigs, J. V.: Personal communication. Aug. 26, 1959.
8. Meigs, J. V. and Sturgis, S. H.: *Progress in Gynecology*. Vol. 3. New York, Grune & Stratton, 1957. p. 424.
9. Meigs, J. V.: Fibroma of ovary with ascites and hydrothorax—Meigs' syndrome. *Am. J. Obst. & Gynec.* 67:962, 1954.
10. Meigs, J. V., Armstrong, S. H., Hamilton, H. H.: A further contribution to the syndrome of fibroma of the ovary with fluid in the abdomen and chest, Meigs' syndrome. *Am. J. Obst. & Gynec.* 46:19, 1943.
11. Novak, E., Novak, E. R.: *Textbook of Gynecology*. 5th edition. Baltimore, Williams & Wilkins Co., 1956. p. 474.
12. Raiford, T. S.: Meigs' syndrome. *Ann. Surg.* 140: 763, 1954.
13. Rowlands, B. C., Garrett, J. V., King, P. A.: Meigs' syndrome. *Brit. J. Surg.* 41:645, 1954.

The diets of the Trappists, by current standards, would not usually be considered extremely low in fat. They are, however, quite low in animal fat, containing approximately 36 gm. of butterfat per day. The concentration of blood cholesterol in the monks was, on the average, considerably lower than that of healthy men of comparable ages in Cleveland, Ohio.

The samples numerically are small but provide interesting examples of white men who throughout much and often most of their lives make a concerted and consistent effort to live in placidity, frugality and abstinence from all animal foods except milk and very small amounts of cheese.

The relatively low blood cholesterol levels have not spared these men from arteriosclerosis or arterial hypertension. The data suggest, in fact, that arterial

hypertension is more frequent in them than in other men of the same age in the American population generally.

Although we may be willing to accept the evidence that abnormally high cholesterol levels accelerate the progress of cardiovascular degeneration and arterial hypertension, it does not necessarily follow that, in the average person, diets unusually low in animal fat are beneficial. In the monks studied here it seems evident that diets low in animal fat and associated with relatively low serum cholesterol levels over a long period of years are not sufficient in themselves to offset the advance of cardiovascular degeneration and arterial hypertension.

McCullagh and Lewis

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# A NEW TYPE OF NEURONAL INCLUSION IN PARALYSIS AGITANS

## A CASE REPORT

CLARK D. FOBES, Lieutenant, MC, USN

*From the Pathology Division, U. S. Naval Medical School,  
National Naval Medical Center, Bethesda, Md.*

ALBERT CANNON, M. D.

*Assistant Professor of Clinical Pathology, Medical College  
of South Carolina, Charleston, S. C.*

Since the time of Van Leeuwenhoek,<sup>1</sup> intracellular particles of all types have piqued the curiosity of histologists and pathologists. These structures are protean in form and ubiquitous in distribution. Certain of these have been termed inclusion bodies or simply inclusions and for the purposes of this paper are defined as discrete, spherical, intracytoplasmic or intranuclear bodies with no known function which may or may not be harmful to the cell host.

One of the earliest descriptions of non-viral inclusions in the brain is that of La Fora and Glueck<sup>2</sup> in cases of myoclonic epilepsy (1911). Since then inclusions have been reported in a variety of diseases such as amaurotic family idiocy,<sup>3</sup> paralysis agitans,<sup>4</sup> Pick's disease,<sup>5</sup> Alzheimer's disease,<sup>6</sup> chronic rheumatoid encephalitis,<sup>7</sup> hepatocellular degeneration<sup>8</sup> and multiple sclerosis.<sup>9</sup> Wolf and Orton<sup>10</sup> have reported intranuclear inclusions in the brain in 25 patients with disease entities not related to the central nervous system. In addition, inclusions are seen in viral diseases such as rabies, herpes encephalitis,<sup>11</sup> chronic encephalitis,<sup>12</sup> and cytomegalic inclusion disease.<sup>13</sup>

In this paper, another type of inclusion body morphologically distinct from the Lewy inclusion,<sup>4</sup> found in the brain in a case of paralysis agitans will be described.

### *Case Report*

The patient was a 74 year old white male with a three year history of progressive weakness, tremor, and unsteady shuffling gait. He sustained a fracture of the left femoral neck approximately one year prior to his death and as a result became a semi-invalid. Approximately 10 days prior to his death he developed an acute febrile illness to which he succumbed. Significant

autopsy findings included severe bilateral necrotizing lobular pneumonia, and infarcts of the floor of the fourth ventricle and internal capsule bilaterally due to multiple thrombi in the arterioles of the involved areas of the brain.

Histologic examination of sections of substantia nigra and locus caeruleus stained with hematoxylin and eosin revealed marked reduction in the neurons and Lewy inclusions. In addition small eosinophilic cytoplasmic inclusions were found in Purkinje cells, and neurons of the corpus striatum, substantia nigra and locus caeruleus. It is these latter inclusions that constitute the basis of this report.

### *Methods and Materials*

Sections of frontal, parietal, and occipital cortex, corpus striatum, thalamus, substantia nigra, red nucleus, hippocampus, dentate nucleus, cerebellar cortex, pons, and medulla, were prepared from the brain of this case which had previously been fixed by injection with 10% neutral formalin followed by immersion in formalin for one week. The tissue was embedded in paraffin, cut at 6 microns thickness, and stained with hematoxylin and eosin, Heidenhain's azan, Giemsa, myelin, Holmes,<sup>14</sup> phosphotungstic acid hematoxylin and periodic Schiff stains.

Controls were run on several brains from successive autopsies, all of which were fixed, sectioned, and stained in a similar manner. The inclusions under discussion stain red or pink by the Giemsa, Heidenhain's azan, and hematoxylin and eosin methods. They do not stain with PAS reagent; rather they stand out as a light gray disc on a background of the surrounding magenta PAS positive granules in sections stained by the MacManus method. The structures are homogeneous in character, measure approximately 5 micra to 7 micra in diameter and are surrounded by narrow halo. (Fig. 1 & 2) They are easily distinguishable from the larger, concentrically laminated Lewy inclusions. (Fig. 3 & 4) Sections stained by the Giemsa method reveal these structures in the Purkinje cells (Fig. 5) and in the corpus striatum as well. The similarity and proximity of these inclusions to nucleoli cannot be denied, but the inclusions are easily demonstrable in cells with a separate and well defined nucleus containing a nucleolus.



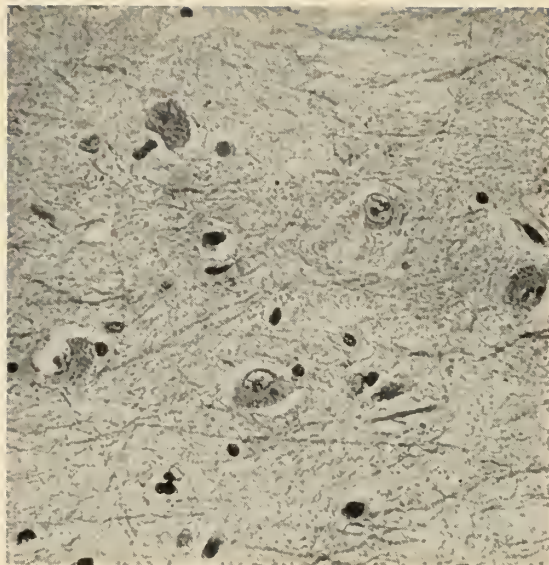


Figure 1

A section of corpus striatum demonstrating two neurons containing cytoplasmic inclusions. x100

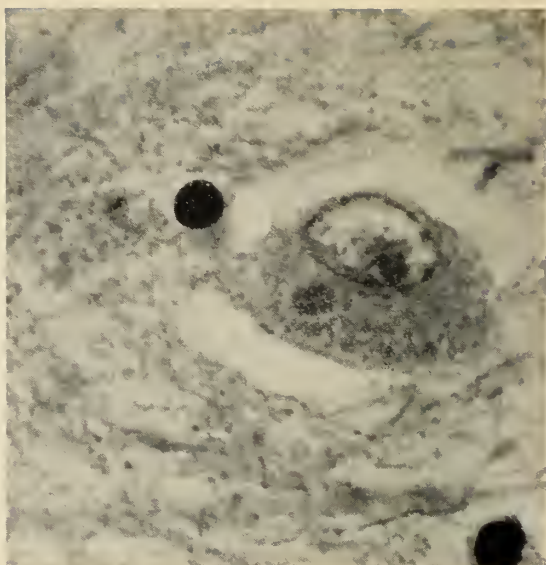


Figure 2

A higher magnification of a neuron containing an inclusion from Fig. 1. This inclusion is smaller and the halo is much less distinct than in the Lewy inclusion. x430

### Discussion

The pathogenesis of these inclusions is not clear, but with the available evidence, two lines of thought may be followed. The structures may be viral inclusions and may represent the underlying etiology of the patient's Parkinsonism. However, no neurofibrillary tangles, characteristic of postencephalitic Parkinsonism,<sup>4</sup> were found in the neurons of

the cell masses involved. In addition, there is no evidence of cellular reaction to the inclusions except perhaps for the marked reduction in the number of cells of all three portions of the substantia nigra.

On the other hand, the structures may represent an alteration or degeneration of the cytoplasm and may be lifeless temporary com-



Figure 3

A section of substantia nigra showing a typical Lewy inclusion in a neuron. Note the marked diminution of neurons and phagocytosis of pigment. x70

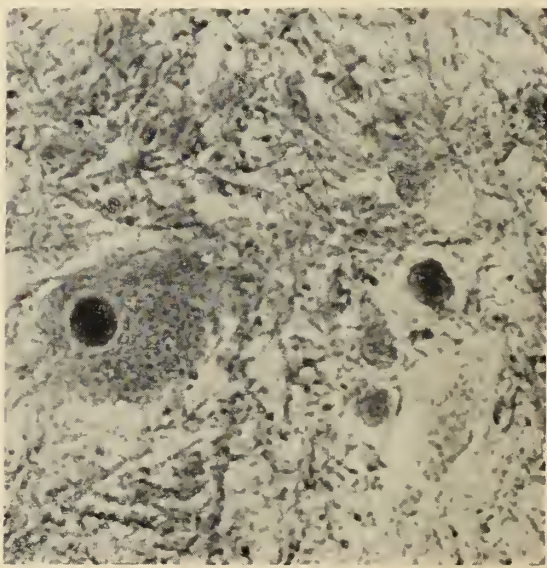


Figure 4

A higher magnification of a Lewy inclusion showing the characteristic wide halo and location among the pigment granules of the neuron. x430

ponents of the cytoplasm.<sup>15</sup> The stability of these spherules under the conditions of fixation, dehydration, sectioning and staining would tend to indicate that they do not consist of lipid material or glycogen. Their failure to stain with PAS indicates only that they do not belong to the large group of mucopolysaccharides. Their constant eosinophilia would tend to indicate that they are protein in nature. Most striking is the similarity of the staining characteristics of these bodies to the staining characteristics of the Lewy inclusions.<sup>4</sup> The latter fact accompanied by the observation of Lewy inclusions in the same material might lead one to infer that the smaller inclusions are merely precursors of the fully developed Lewy inclusion.

### Summary

A heretofore unreported type of inclusion body found in the basal ganglia of the brain stem and dentate nucleus in a case of parkinsonism is described. This inclusion is intracytoplasmic, eosinophilic, and is found most abundantly in the substantia nigra. It is

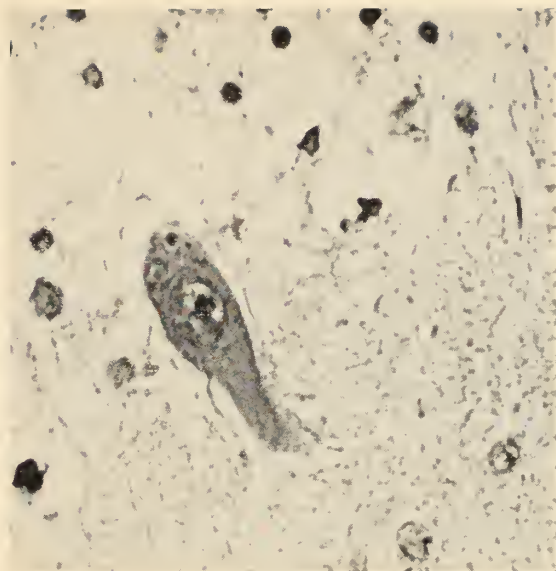


Figure 5

Another inclusion found in a Purkinje cell of the cerebellum.  $\times 430$

morphologically distinct from the Lewy inclusion, but the possibilities that it represents a viral inclusion or a precursor of the Lewy inclusion are suggested.

### REFERENCES

1. Curtis, W. C. and Guthrie, M. J.: *General Zoology*. 4th edition. New York. John Wiley and Sons, Inc., 1946. p. 88.
2. LaFora, G. R. and Glueck, B.: Beitrag zur Histopathologie der myoklonischen Epilepsie. *Ztschr. f. d. ges. Neurol. u. Psychiat.* 6: 1, 1911.
3. Hodskins, M. B. and Yakovlev, P. I.: Anatomico-clinical observations on myoclonus in epileptics and on related symptom complexes. *Am. J. Psychiat.* 9: 827, 1930.
4. Greenfield, J. C. and Bosanquet, F. D.: The brainstem lesions in Parkinsonism. *J. Neurol., Neurosurg. & Psychiat.* 16: 213, 1953.
5. Alzheimer, A.: Ueber eigenartige Krankheitsfälle des spätern Alters. *Ztschr. f. d. ges. Neurol. u. Psychiat.* 4: 356, 1910-11.
6. Berlin, L.: Presenile sclerosis (Alzheimer's Disease) with features resembling Pick's Disease. *Arch. Neurol. & Psychiat.* 61: 369, 1949.
7. Benda, C. E.: Chronic rheumatic encephalitis, torsion dystonia and Hallervorden-Spatz disease. *Arch. Neurol. & Psychiat.* 61: 137, 1949.
8. Inose, T.: Hepatocellular degeneration, a special type. *J. Neuropath. & Exper. Neurol.* 11: 401, 1952.
9. Steiner, G.: Acute plaques in multiple sclerosis, their pathogenetic significance and the role of spirochetes as etiological factor. *J. Neuropath. & Exper. Neurol.* 11: 343, 1952.
10. Wolf, A. and Orton, S. T.: The occurrence of intranuclear inclusions in human nerve cells in a variety of diseases. *Bull. Neurol. Inst., New York* 2: 194, 1932.
11. Pinkerton, H.: The morphology of viral inclusions and their practical importance in the diagnosis of human disease. *Am. J. Clin. Path.* 20: 201, 1950.
12. Smith, D. E.; Trufant, S. A.; Phillips, V. K. and Smith, M. G.: Chronic encephalitis with intranuclear and intracytoplasmic inclusions. *Am. J. Path.* 27: 699, 1951.
13. Haymaker, W., Girdany, B. R., Stephens, J., Lille, R. D. and Fetterman, G. H.: Cerebral involvement with advanced periventricular calcification in generalized cytomegalic inclusion disease in the newborn. *J. Neuropath. & Exper. Neurol.* 13: 562, 1954.
14. Margolis, G. and Pickett, J. P.: New applications of luxol fast blue myelin stain. *Lab. Invest.* 5: 459, 1956.
15. Maximow, A. A. and Bloom, W.: *A Textbook of Histology*. 7th edition. Philadelphia, W. B. Saunders Co., 1957, p. 17.



# KANASII OR TUBERCULOSIS

FRANK L. GEIGER, M. D.

*Chief, Cancer, Heart Disease and Tuberculosis Services  
Division of Disease Control  
State Board of Health of S. C.*

*Columbia, S. C.*

**M**ycobacterium *Kansasii* is the new name given to the Group I "atypical acid-fast bacillus" which produces pulmonary disease in man indistinguishable clinically or radiographically from pulmonary disease caused by typical bacilli. The differentiation of the pulmonary diseases caused by Group I, Group II, Group III (most frequent type found in South Carolina), or Group IV atypical acid-fast bacilli (see laboratory criteria listed below) from typical tubercle bacilli is a bacteriologic one. However, the clinician should be alerted to the possibility that he is dealing with an atypical pulmonary acid-fast infection and not tuberculosis when there is a delay in the response to treatment with appropriate anti-tuberculosis drugs. Nevertheless, the only safe course to follow is the bacteriologic examination of the sputum for "atypical acid-fast bacilli".

A simple working classification of atypical acid-fast organisms, based largely upon ability to form pigment and upon rapidity of growth, is listed below:

*Group I.* Pigment appears only where organisms are exposed to light while actively growing. This is the most homogeneous of the groups and growth is slow at 37° C. or at room temperature. Pigmentation appears in response to short periods of light exposure (formerly called photochromogens). *M. kansasii* is the new name given to this species and most commonly is seen as cause of human disease in the central states of Kansas, Illinois and Texas.

*Group II.* Pigment is present regardless of the presence or absence of light during growth period (sometimes called scotochromogens). Yellow or orange pigmentation may become a deeper orange-red after exposure to light. Growth is same as in Group I.

*Group III.* Very little or no pigment formation (sometimes called nonchromogens).

Growth is about the same as Group I. Group III organisms are reported predominantly in the Southeastern United States as cause of pulmonary human disease.

*Group IV.* Characterized by rapid growth, usually in three to four days at 37° C. or at room temperature or both. Pigment is lacking (sometimes called rapid growers).

The present evidence indicates that "atypical acid-fast organisms" are not spread from person to person. There is, as yet, no report of such infection occurring in the same family, and cross-infection with "atypical mycobacteria" in hospitalized patients has not occurred. Patients with "atypical acid-fast organisms" can acquire tuberculosis from active cases of tuberculosis at home or in tuberculosis hospitals if not isolated. Should present or future epidemiological studies point to a possible source for these organisms in the environment, a search for them in the suspect source as in domestic animals, in pets, in soil or elsewhere should be undertaken.

Results of treatment in large series of patients, especially with pulmonary disease caused by Group I and Group III atypical acid-fast bacilli, are becoming available. Disease caused by Group I organisms can be destructive and cause death of patients, but responds reasonably well to treatment with hospitalization, anti-tuberculosis drugs and surgical resection or collapse after prior medical preparation. Data on results of treatment in patients with pulmonary disease caused by Group III organisms indicate that the over-all results do not appear to be quite as favorable as with Group I organisms and much less favorable than with disease caused by typical tubercle bacilli. Group III "atypical acid-fast bacilli" have more pre-treatment resistance to Isoniazid than do other "atypical acid-fast bacilli", with delayed and oftentimes poor response to medical therapy. Surgery is used



and recommended in a high percentage of patients to close cavities and control bacterial infection.

During the past several months, the Division of Laboratories, South Carolina State Board of Health, has isolated Group III "atypical acid-fast bacilli" from sputa submitted on ten patients. All the cases showing the presence of Group III atypical acid-fast bacilli have been confirmed by the Communicable Disease Laboratory in Chamblee, Georgia.

The common characteristics of these ten patients with pulmonary disease caused by Group III "atypical acid-fast bacilli" are as follows. All ten patients had advanced disease as shown by chest roentgenograms. Nine of these patients have had sanatorium care. Two are at present hospitalized at the South Carolina Tuberculosis Sanatorium; one is a 38 year old Negro female with advanced pulmonary disease which has shown little or no improvement clinically or bacteriologically on anti-tuberculosis drugs during the last eight months; the other one is a 44 year old white male with advanced pulmonary disease who because of the poor results during the past one and one-half years with the anti-tuberculosis drugs has had a right upper lobectomy to be followed by a right thorocoplasty in the near future to control the infection.

In this series of cases with pulmonary disease caused by Group III "atypical acid-fast bacilli" there are seven males and three females, seven whites and three Negroes. The oldest patient was 77 years of age when the diagnosis was first made and the youngest was 38 years of age; the average age of the ten patients is 53 years, and the average length of their illness has been four years. There has been one death in the series, a white male, aged 50 years who was known to have pulmonary disease for thirteen years. The cause of death of this patient was cor pulmonale.

### *Summary*

With the advent of increasing knowledge and curiosity of the medical profession coupled with the enthusiasm and pioneering on the part of bacteriologists, the diagnosis and treatment of pulmonary diseases are becoming more and more precise. Pulmonary disease caused by Group III atypical acid-fast bacilli is a definite clinical and bacteriological entity and one that is responsible for considerable morbidity in this state. Through our accelerated alertness and an increased index of suspicion, the solution to the riddle of pulmonary disease resulting from "atypical acid-fast bacilli" will be attained.

# THE GREENVILLE COUNTY MEDICAL SOCIETY HISTORICAL SKETCHES

## EARLY SOCIETIES

J. DECHERD GUESS, M. D.

*Greenville, S. C.*

After my book, "A Medical History of Greenville County, South Carolina" went to press, there were found among some old family papers by Mr. Marion M. Hewell some minutes and other documents relating to Greenville medical organizations. They were dated at intervals from 1873 to 1889. They include copies of two successive constitutions and three successive sets of by-laws of what were an original Greenville Medical Association and two successive organizations by the same name. There are also minutes of the meetings of these societies. These documents reveal an interesting realization of the need for an organization by the doctors of the community in these post-reconstruction years, and of their difficulties and frustrations in maintaining such an organization.

It appears that a society, called the Greenville Medical Association, was organized first in 1873. Its constitution referred to it as an "auxiliary to the State Medical Association." There is an undated constitution which differs in some of its provisions from that dated March 3, 1873. I suspect that this was probably a committee's preliminary draft which preceded the adoption of a perfected instrument. However, it may be an indication of the existence of either an earlier or a later society.

There is a third copy of a constitution which bears the notation: "Articles of Constitution and By-laws read and adopted on May 23, 1887."

Each of these states that the name of the organization would be the "Greenville Medical Association."

There are other similarities. Each provided for two vice-presidents, but only the first required the election of a chaplain. Regular meetings were to be held quarterly, in May, August, November and February. The May meeting was designated the annual meeting.

This is the last of a series of sketches dealing with medical doctors and organizations in Greenville County during the first century and three-quarters of its history. This sketch deals with a period of a decade and a half, beginning shortly before the revolution of 1876 when Wade Hampton delivered South Carolina from carpet bagger and negro rule. Medically, that was a significant period. It was an era of continuous struggle to organize and maintain a scientific medical society. The period ended in 1891, when the Greenville County Medical Society was chartered as a constituent society of the South Carolina Medical Association.

Election to membership was to be by ballot and required a favorable vote by two-thirds of the members present. The signing of the constitution by new members was required. The initiation fee was set at \$1.00 by the earlier document and at \$2.00 by the later. Monthly dues were 25 cents.

Each constitution stated: "Each member is expected to make a verbal or written report of any anomalous or interesting case that may have passed under his observation." In addition to case reports essayists were to be selected to prepare and to present at successive meetings an essay on some medical subject. This essay was to be open for discussion by the members.

Withdrawal from the society required written resignation and a notice of three months.

Re-election of officers before the lapse of a year was forbidden. The Code of Ethics of the American Medical Association was approved.

Neither copy contained statements of basic objectives.

There are minutes of meetings both regular and called up through May 3, 1880—that is for seven years. On that date, the Association met in annual session. Dr. G. L. Swandale

was elected secretary. Dr. J. W. Hewell, grandfather to Mr. Marion Hewell, had been secretary. Whether this change in secretaries accounts for it or not, there is a gap of seven years in the minutes in Mr. Hewell's possession. The next meeting recorded after the meeting of May 3, 1880 was held on May 16, 1887. The minutes state that: "Motion by Dr. Swandale to appoint a committee to draw up by-laws and select a name for the society." This indicates that at some time during those seven years, the society became inactive and that now an effort to revive it was made.

A constitution and by-laws were adopted on May 23, 1887. These by-laws required that the meetings be held in private, that each member deem himself bound to maintain the honor of the association and to that end should preserve the strictest order and decorum during the meetings, that the member should rise to speak and should address himself to the president, that he should confine himself strictly to the subject under discussion and that he should avoid all personalities and offensive expressions. It was stipulated that all "conversation either in whispers or aloud should be avoided during the meetings."

This reorganization occurred four years before the society was chartered as a constituent society of the State Medical Association. Dr. C. T. J. Giles has said that a county society was reorganized in 1890 or 1891. If that be true, this Greenville Medical Association, organized in 1887, must have become inactive as had its predecessors.

Although the successive organizations were designated officially in their constitutions as associations, it is noted in reading the minutes that they were referred to more and more frequently as time went on as "the society."

That economics, both individual and professional, was ever present in the thinking of these doctors of the late nineteenth century, when the state was still impoverished after war and reconstruction, is indicated both by the small initiation fees and monthly dues and assessments and by the recurring reference in the minutes to the fee schedule. The assessment for entertainment of the State Medical Association, when it met in Greenville in 1879, was \$5.00. The pro rata assessment for the

establishment of a society library and reading room was \$5.00. When the State Association met in Greenville in 1878, a committee was appointed to secure reduced hotel rates for those attending the meeting. The ladies of the Presbyterian Church agreed to serve an association dinner for \$1.00 per plate.

In 1880, a committee was appointed to examine and revise the fee bill. In 1887, a committee "on the fee bill and on collections" was appointed.

It appears that the first medical library was established in 1879. On August 6 of that year, Dr. R. D. Long moved that a committee be appointed to report "on the propriety of organizing a medical library." Drs. Long, George E. Trescott, and J. W. Maxwell were appointed. The committee reported: "It is eminently wise and proper that a library and reading room be established for use of members of the society." The library was opened early in 1879. One year later, Dr. J. L. Dorroh (in the minutes his name was written variously as Dorrough, Dorough, or Dorroh) moved that the library be continued.

Again at the organizational meeting on May 23, 1887, a committee was appointed "to consider the propriety of establishing a new library or reading room."

At the meeting to attempt to reactivate the South Carolina Medical Association held in Spartanburg in 1869, doctors from Greenville were present. It was not, however, until 1873 that duly elected delegates from the Greenville Association were registered for the first time. Five delegates and five alternates were elected by the newly organized Greenville Medical Association to represent it at the meeting of the State Association held in Greenville in 1878. The delegates were: Dr. W. R. Jones, who was president of the Greenville Society, Dr. E. F. S. Rowley, its treasurer, Dr. W. A. Mooney, its 2nd vice-president, Dr. J. L. Dorroh and Dr. C. Few. Dr. S. S. Marshall, a member of the Greenville Association, was elected president of the State Association that year. The official delegates the next year were Drs. W. R. Jones, J. L. Dorroh, W. Thompson, and R. D. Long.

In 1880 the delegates to the State Association meeting were: Drs. George E. Trescott,



W. R. Jones, E. F. S. Rowley, S. S. Marshall, and R. D. Long.

As one reads the minutes of those early Greenville County Societies or associations as they were called, he finds that certain names occur over and over again. George E. Trescott, W. R. Jones, S. S. Marshall, E. F. S. Rowley, R. D. Long, W. Thompson, W. S. Miller, J. L. Dorroh J. W. Maxwell—these undoubtedly were the leaders of organized medicine in Greenville County during the last quarter of the nineteenth century. Some of them were not mentioned in my history. Several of them do not occur in the record of Greenville County physicians compiled by the historian of the auxiliary of the Greenville County Medical Society. It appears that had it not been for these old minutes so belatedly discovered, many of the early leaders of Greenville's medicine would have been lost to history.

Among the leaders who seem to have been forgotten are: Dr. J. W. Hewell, who was a classmate of the late Dr. Lane Mullally, greatly beloved professor of obstetrics at the Medical College of the State of South Carolina for so many years. Dr. Hewell was also a classmate of Dr. Edward F. Parker, professor of diseases of the eye, ear, nose and throat. Dr. Hewell was a delegate to the State Association in 1879, and was second vice-president of the County Society in 1880-81. No doubt his colleagues gave him many other honors, for he was still a young man when the record stops. His name is not among the signers of the new by-laws of 1887.

Dr. W. Thompson is another who seems to have been omitted from other records. He was acting secretary of the new association on January 23, 1878 and was the elected secretary in 1878-79. He was a delegate to the State Association in 1879 and again in 1880. His name does not occur among the signers of the by-laws in 1887.

Dr. J. L. Dorroh was present at the meeting on February 4, 1878, when he was elected a delegate to the State Association meeting. He was treasurer of his society in 1879 and became first vice-president the next year. He attended the meetings regularly and took an active part in the scientific work of the society.

He advocated and supported the establishment of a reading room or library. He was a charter member of the reorganized society in 1887.

Dr. Miles, whose given name or initials were never recorded, was elected to membership in the society on January 22, 1878. He became second vice-president in 1879 and was an alternate delegate to the state meeting that year. His name is not among the signers of the by-laws of 1887.

Dr. W. A. Mooney was a member of the first association. He was elected a delegate to the State Association meeting on March 4, 1878. Dr. T. Stokes was also a member of the first organization. Neither joined the society of 1887 as charter members.

Dr. R. D. Long was active in the county society until his death at 42 years of age, in 1886. He had been an alternate delegate to the State Association meeting in 1878 and again in 1879. He was elected president of his county society in 1880.

"County doctors" were invited to join the successive Greenville associations. Dr. David Ross Anderson was one of these. He practiced in the Fairview Community for half a century and was preceptor to Dr. H. B. Stewart, who practiced in the same community for so long. Dr. Crieghton was another country doctor. The old Crieghton home is still standing. It is in Greenville County across the river from the Reidville Community. Reidville was the boyhood home of Dr. J. L. Anderson and Dr. Tom Brockman.

C. Few, whose name occurs so often, seems to have been a brother of Dr. B. F. Few. His given name was Columbus. It is thought that he ultimately moved to Hendersonville, N. C.

Dr. W. S. Miller began practicing in Greer. He later moved to Greenville.

There were only twelve charter members of the reorganized society of 1888. They were E. S. Burnham, of whom I have no other record, A. D. Hoke, who was, perhaps, the Dr. Hoke who was a dear friend of Dr. A. B. Crook and who was wounded in Virginia early in the war. Dr. Crook hastened to attend him and remained in Virginia assisting in the treatment of the wounded until he had overtaxed his strength. He returned to Greenville and died soon afterward. Others were: Dr. E. F. S.

Rowley, Dr. R. D. Long, Dr. J. M. McClanahan, a partner of Dr. Trescott in operation of the Greenville Infirmary; Dr. J. H. Dean, of whom I know nothing further; Dr. W. R. Jones; Dr. George E. Trescott; Dr. J. L. Dorroh; Dr. S. S. Marshall; and Dr. J. W. Vance and Dr. J. Crieghton, neither of whom seem to have left any other record.

The members of these early societies took the scientific work of the societies seriously. It is distressing to read of the cases which they reported. Diphtheria was endemic. There were no laboratory diagnostic aids and no specific treatment. Every sore throat in a child and any hoarseness aroused terror in the parent and anxiety in the doctor. If the little patient recovered, the disease was probably not diphtheria; if he died, it almost certainly was. There were several deaths reported at almost every meeting. It was not unheard of to lose every child in a family.

Typhoid fever raged every summer. The disease lingered long and recovered, or it was terminated by intestinal hemorrhage or perforation. In either instance the doctor was scientifically helpless, but he was a bulwark of strength and comfort to the family.

Surprisingly few cases of puerperal fever were reported.

"Potassium," probably potassium nitrate (saltpeter), was used to treat "chronic albuminuria." Quinine was used in typhoid and seemingly in all other fevers. If the fever remitted in typhoid while under treatment with quinine, the disease was termed typhoid-malaria or typhoid with malarial manifestations.

All sore throats, including diphtheria, were swabbed with carbolic acid and tincture of myrrh. Potassium (per) manganate and chromic acid, iron, and quinine were prescribed. The contagiousness of diphtheria by contact was suspected, but was still a debatable subject. One case of abortion, treated with *veratrum viride*, was reported. A fatal case of diphtheria was treated with sulphur fumigation after administration of iron and quinine. Dr. W. C. Jones reported a successful operation for "the stone." Pneumonia was frequent and deadly, with a crisis awaited anxiously on the seventh, ninth, or eleventh day of the disease, and with purulent empyema a frequent sequela.

How strange all of this must seem to younger readers, many of whom have never seen a case of diphtheria, typhoid fever, or a crisis in pneumonia. Is it any wonder that these doctors of the eighteen-eighties and nineties, who had their poker clubs, who liked a drink or several, and who for the most part were not pious, elected a chaplain for their society and opened their meetings with prayer? Is it any wonder that their patients felt so dependent upon their doctors and their doctors felt so dependent upon God? These doctors could not cure, but they could and did render comforting, kindly, sympathetic service to their clients. They frequently hid their sympathy under a gruffness of manner, and their helplessness under an air of arrogant self-confidence. But withal they had hearts of gold and the respect, love, and esteem of their people.

# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH

#### Hyperventilation

DALE GROOM, M. D.

**Case Record**—A 32-year-old lady was admitted to the hospital because of attacks of numbness and tingling noted particularly in the face and extremities. She described the attacks as coming on without warning, lasting usually an hour or so, accompanied by extreme apprehension, alternating sensations of hot and cold, often fears of a dread disease or impending death. The recurrent nature of these symptoms had increased her anxiety about them. When asked specifically about any disturbance in her respiration she could recall none.

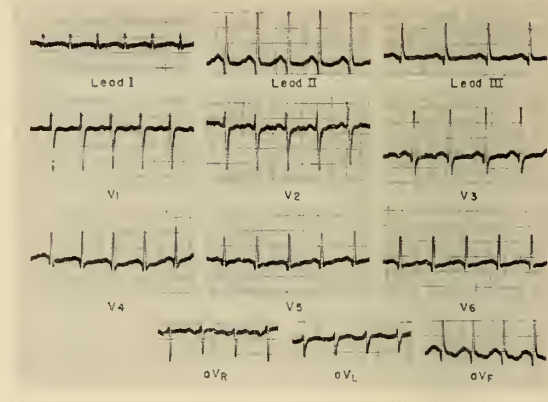
Prior to onset of these attacks some three months previously, she had been a reasonably stable, outgoing individual who had made a satisfactory adjustment to marriage and motherhood. She did recall having experienced mild symptoms of a similar nature at times when a college student but had never had an illness of any consequence until the present one, apparently ushered in by a problem of great emotional import to her. Nevertheless she had been able to carry on a strenuous schedule of civic activities and outside employment in addition to care of her three children at home. A marked weight loss was attributable to her loss of appetite.

Significant findings were her labile tachycardia, vasomotor mottling and flushing of the skin of the neck and chest, cold moist hands and feet. There was no neurological deficit. Her blood calcium, phosphorus and total and fractional blood proteins were all within the normal ranges.

This electrocardiogram was recorded during an episode of voluntary hyperventilation and is similar to one made on admission. A subsequent tracing following rest and reassurance was normal.

**Electrocardiogram**—The tachycardia is presumably a sinus one inasmuch as the P waves are normal as are the P-R and QRS intervals. Its rate varies widely, between 100 and 150. T waves are generally flattened or notched throughout. The electrical axis is predominantly vertical with depolarization directed toward the left leg electrode aVF, and counterclockwise rotation is evidenced by the typical left ventricular complexes with Q waves of septal activation as far to the right on the precordium as the  $V_3$  position. Likewise the Q waves of leads II, III and aVF, of minimal width (area), are doubtless positional in origin.

**Discussion**—This electrocardiogram departs from the usual standards of normality principally in its rapid



varying heart rate and the marked T wave changes which are of a non-specific nature. Knowing the character of the patient's illness one might note that the S-T segments are a little long (at this rapid rate there should be practically no discernible segment) and that in  $V_1$  there may be minimal S-T depression, ordinarily insignificant. Reversion of the T and S-T changes to normal on a subsequent tracing demonstrates the reversibility of these alterations of repolarization.

Certainly no test is of greater value in differentiating structural from functional cardiac disorders than the electrocardiogram. However it is far from infallible. Neuroses and anxiety states variously labeled "neuro-circulatory asthenia", "effort syndrome", "soldier's heart", "D.A.H.", "irritable heart", or just plain "cardiac neurosis"—of which the *hyperventilation syndrome* is often a part—perpetually simulate the syndromes of organic disease. Unfortunately the idea grew up in years past that the so-called functional disorders do not cause electrocardiographic abnormalities and that the results of physical, laboratory, roentgenographic, electrocardiographic and metabolic studies are always negative in these patients barring some concurrent organic disorder. Diagnoses of "myocardial damage" or "myocarditis" were too often made on the basis of minor T wave changes plus symptoms which were in reality psychogenic. An appreciation of how much emotion can do to the cardiovascular system—even to the point of accelerating circulation sufficiently to produce functional murmurs at times—has tempered the interpretation of such findings.

Quite likely several mechanisms are involved in the T and S-T changes induced by hyperventilation, the best understood being the reduction in amount of ionized (physiologically active) calcium in the blood by the alkalosis incident to the excessive loss of  $\text{CO}_2$



in over-breathing. The electrical changes are those of hypocalcemia, most specifically a prolongation of the Q-T interval by lengthening of the S-T segment. Direct autonomic influences are also indicated by the wide variations in heart rate, sometimes in the P-R interval, and the reported restoration of such T waves to normal by ergotamine tartrate.

A perplexing feature about these cases is that commonly the hyperventilation is not obvious to the patient or to an observer. Rather, the effect seems to be a cumulative one whereby excessive  $\text{CO}_2$  is lost over a period of time until a critical level is reached or until even a slight increase in respiration is sufficient to trigger the typical symptoms. A definite vicious cycle is often evident, as in this case, whereby the physical symptoms themselves evoke more anxiety, more hyperventilation and hence more severe symptoms. Asking the patient to voluntarily restrict respiration or to rebreathe into a paper bag is helpful but no measure of treatment is quite as effective as reproduction of the symptoms in the patient by deliberate hyperventilation, thereby demonstrating most convincingly the cause and mechanism of the syndrome.

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Dr. Dale Groom's book *Clinics in Electrocardiography* is available through the Medical College Book Store, or from the publisher, Charles C. Thomas, Springfield, Ill.

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### Postoperative Complications — V. Venous Thrombosis

R. RANDOLPH BRADHAM, M. D.  
Department of Surgery

M. P., a 30 year old white male with paraplegia is at present a patient in the Medical College Hospital. The paraplegia resulted from transverse myelitis sustained in an automobile accident. He developed multiple decubitus ulcers over the femoral trochanters and ischial tuberosities and was admitted for repair of these ulcers and rehabilitation to ambulation with braces. One ischial tuberosity ulcer was repaired without event. Several days following repair of the second ulcer, the patient developed thrombophlebitis of the left leg. His leg exhibited the swelling, discoloration, and increased heat consistent with deep venous thrombosis involving the common femoral vein.

Ordinarily this patient would have been started on anticoagulant therapy immediately following the earliest evidence of deep vein thrombosis. However, he had damaged his urethra by inadvertently pulling out his urethral catheter with the 5 ml. bag inflated. This caused moderate bleeding. We were hesitant to prolong his clotting time until the urethral bleeding had stopped. As a temporary measure, fibrinolysin, 100,000 units, was given intravenously on each of two successive days. This was apparently of no benefit clinically. Approximately 36 hours after signs of deep venous thrombosis were noticed, anticoagulant therapy was begun. Clotting time and prothrombin time were obtained as base line controls. Aqueous sodium hepa-

rin, 50 mg., was given intravenously. Clotting times were obtained one half hour and three and one half hours following this initial dose. On the basis of the response to this intravenous dose, it was elected to give the patient 75-125 mg. of aqueous sodium heparin subcutaneously every 8 hours, each dose varying with a clotting time determination obtained seven hours following the preceding dose. Dicumarol therapy was begun at the same time with an initial dose of 300 mg., a second day dose of 200 mg., and a third day dose of 100 mg. Subsequent dosage was based on daily prothrombin activity. Heparin was discontinued when the prothrombin activity was reduced below 30 per cent of normal. The patient's leg has decreased in size, is less warm, and has a more normal color.

#### Discussion

Valuable time was lost because of the necessary delay in starting this patient on anticoagulant therapy. These agents do nothing to diminish the size of the thrombus already formed but will prevent propagation of this thrombus if given in sufficient quantity to prolong the clotting time two to three times the normal value. By preventing further propagation, the degree of postphlebotic sequelae will be reduced proportionately as this state depends upon the extent of obliteration of the venous system in an extremity. Once this clot begins to form, propagation is rapid during the first 24 hours. Therefore, the effectiveness of anticoagulant therapy will depend upon the time interval between the occurrence of the thrombus and the initiation of a state of blood hypocoagulability. Intravenous heparin is the most logical method of initiating an immediate state of hypocoagulability. Once this has been accomplished, heparin by subcutaneous or intramuscular injection can be used to maintain prolonged clotting times. Dicumarol can be given initially and heparin discontinued when the prothrombin time becomes less than 30 per cent.

Unfortunately the incidence of deep venous thrombosis has not decreased. Although present methods of therapy have reduced morbidity associated with pulmonary embolus, infarction, and post-phlebotic sequelae, the devastating effects of deep venous thrombosis continue to be one of our major postoperative complications.

Much thought and analysis has been given toward determining the disease states and factors predisposing to this complication.<sup>1, 2</sup> It is generally agreed that heart disease is the most common and ominous condition predisposing to thromboembolism. The patients of advanced years with heart disease and cancer are the group most liable to have thrombophlebitis. There is a fairly high incidence of venous thrombosis in paraplegics, whereas tuberculosis, another disease of recumbency, is associated with a low incidence of this disease. One need only to read the classical collective review on this subject by DeBakey<sup>3</sup> to realize the tremendous variation in incidence of venous thromboembolism.

Manifestations vary greatly but generally two patterns are recognized clinically, thrombophlebitis and

phlebothrombosis. The signs and symptoms of *thrombophlebitis* are pronounced both locally and systemically. The limb is swollen, painful, and discolored. There is associated fever, tachycardia, and leukocytosis. In *phlebothrombosis*, the local manifestations are few. This is the pattern frequently referred to as a "bland" or "silent" venous thrombosis which may give rise to fatal pulmonary embolism without preceding signs or symptoms. Clinicians are divided in their opinions as to whether thrombophlebitis and phlebothrombosis are different stages of the same disease or different disease processes.

Venous stasis, intimal damage, and blood hypercoagulability are considered to be causative factors. In studies carried out by McLachlin and Paterson,<sup>4</sup> it was found that there was a marked tendency for thrombi to form at the apices of valve pockets where stasis of blood should be most extreme. No evidence of vein damage was apparent microscopically at the sites of thrombosis. In later studies McLachlin and associates<sup>5</sup> injected Hypaque into the dorsal vein of the foot for pyclograms. This contrast material was directed into the deep veins by placing a tourniquet at the ankle. Cine-radiographic and rapid cassette changing techniques allowed study of venous flow and stasis in the normal venous system of 100 subjects. Stasis in valve pockets was seen repeatedly. The important feature of this study was that elevating the legs 15 degrees reduced this stasis markedly. This was much more effective than wrapping the legs with elastic bandages or inducing vigorous muscle contractions. The theory that a state of hypercoagulability exists also has its proponents. Sharnoff and associates,<sup>6</sup> in studying 41 unselected patients, obtained blood values which clearly indicated that at least one, and sometimes two, transient, abrupt episodes of marked shortening of blood coagulation times, associated in all instances with a transient increase in platelets, occur in the patient undergoing extensive surgery. It is their opinion that this period may be the most critical and the most likely time for development of either venous or arterial thrombosis. Anyan and associates<sup>7</sup> agree with the theory that a state of hypercoagulability appears to be the basic etiologic factor, although they were unable to clearly define any clotting factor that was out of balance. Vein damage can of course result in thrombosis but it has never been clear whether, in thrombophlebitis, the intimal damage precedes or follows the thrombosis.

Because prevention is always the first line of defense in combatting any disease, clinicians should become more aggressive in these measures. Admittedly these are few. Leg veins should not be used for intravenous infusions unless all other routes have been exhausted. When this route is used, the use of 10-20 mg. of heparin in each liter of fluid will aid in preventing thrombosis. There is good evidence that venous thrombi begin during or shortly after an operation. Elevation of the foot of the operating table and bed will reduce markedly venous stasis during this period.<sup>8</sup> Strong elastic stockings or plastic boots

placed on the patient's legs prior to operation may aid in diminishing superficial venous stasis but will probably be of little benefit in preventing stasis in the deeper veins. For elastic binders to be effective, at least two must be used on each leg and these should be secured with adhesive tape. Unless this is done, these binders will become undone and exert a constricting effect at one or more levels. Early ambulation, although a worthwhile practice, probably does little to prevent venous thrombosis. The time spent ambulatory during the first one or two postoperative days is a pittance compared to the time the patient is recumbent. Much thought should be given to the use of anticoagulant therapy in the postoperative period for patients who have had previous episodes of thrombophlebitis and for those having heart disease and cancer especially when they are in the older age groups.

Management of thrombophlebitis at present is best accomplished with anticoagulant therapy. This method of therapy can effect a significant reduction in morbidity and mortality. Methods of administration, contraindications to anticoagulants, and treatment of hemorrhage are outlined well in numerous articles.<sup>8-11</sup> Our own plan of therapy is very similar to that used in management of the above patient, except that anticoagulants are usually begun immediately upon making the diagnosis of deep venous thrombophlebitis. The superficial variety is treated by anticoagulants only when the process is progressive and not controlled by bed rest, leg elevation, and local heat.

Other methods of therapy are applicable in certain well selected cases. Mahorner, Castleberry, and Coleman<sup>12</sup> obtained excellent results in 16 extremities of 15 patients by thrombectomy. The edema subsided more rapidly than in similar cases treated by conservative measures. In 12 of the 16 extremities, the disappearance of swelling was sudden and most dramatic. In 5 of these patients venograms were done. In 4 of the 5, venograms proved that even a short time after the massive thrombosis was removed, the veins were open and functioning. Byrne<sup>1</sup> recently reported significantly better results with surgical vein interruption than with anticoagulant therapy in a study of 979 cases treated at the Boston City Hospital. These results were particularly true in chronic predisposing states such as cardiac disease or hemiplegia. In this critical analysis, postphlebotic symptoms such as edema, varicose veins, and ulcers occurred as frequently after anticoagulant treatment as after operative interruption of the vein and appeared related to the extent of the initial disease rather than its treatment. Certainly, ligation of the inferior vena cava has its place in management of patients who have pulmonary emboli while on anticoagulant therapy and for those patients for whom anticoagulants are contraindicated.

The development of fibrinolysin preparations represents a significant step toward a successful enzymatic attack upon acute thromboembolic disease. However, at the present time, based on our own studies in the laboratory,<sup>13</sup> we do not believe that the preparations



now available have more than minimal dissolution potential. There are many complexities to this problem and space does not permit their discussion here. In laboratory animals, our experiments resulted in only minimal dissolution of 24 hour old thrombi. We have had little experience with these agents clinically and used fibrinolysin in this patient with the hope that it would be of small benefit to him while anticoagulants

were being withheld. Perhaps, someday, such an agent will be developed which will be potent enough to dissolve the early fibrin clots and revolutionize the therapy of thrombotic disease of man. Until such an agent is available, it is every clinician's duty to continue to use the best methods available to us now, i.e., early diagnosis and early treatment.

REFERENCES

1. Byrne, J. J.: Phlebitis: A study of 979 cases of the Boston City Hospital. *J. A. M. A.* 174:113, 1960.

2. Coon, W. W., Coller, F. A.: Clinicopathologic correlation in thromboembolism. *Surg. Gynec. & Obst.* 109:259, 1959.

3. DeBakey, M. E.: A critical evaluation of the problem of thromboembolism. *Internat. Abstr. Surg.* 98:1, 1954.

4. Paterson, J. C. and McLachlin, J.: Precipitating factors in venous thrombosis. *Surg. Gynec. & Obst.* 98:96, 1954.

5. McLachlin, A. D., McLachlin, J. A., Jorv, T. A., Rawling, E. G.: Venous stasis in the lower extremities. *Ann. Surg.* 152:678, 1960.

6. Sharnoff, J. G., Bagg, J. F., Breen, S. R., Rogliano, A. G., Walsh, A. R., Scardino, V.: The possible indication of postoperative thromboembolism by platelet counts and blood coagulation studies in the patient undergoing extensive surgery. *Surg. Gynec. & Obst.* 111:469, 1960.

7. Anlyan, W. G., DeLaughter, G. D., Jr., Fabrikant,

J. I., Sullenberger, J. W., Weaver, W. T.: Management of acute venous thromboembolism. *J.A.M.A.* 168:725, 1958.

8. Coon, W. W., Mackenzie, J. W., Hodgson, P. E.: A critical evaluation of anticoagulant therapy in peripheral venous thrombosis and pulmonary embolism. *Surg. Gynec. & Obst.* 106:129, 1958.

9. Sarjeant, T. R.: The management of acute ilio-femoral thrombophlebitis. *Surg. Clin. North America.* 40:1261, 1960.

10. Harrower, H. W., Hurwitz, A., and Yesner, R.: The treatment of thromboembolism with aqueous heparin. *Surg. Gynec. & Obst.* 106:293, 1958.

11. Duff, I. F., Zweifler, A. J., Willis, P. W.: Effective anticoagulant therapy. *Seminar Report 5, No. 3: 2, Summer 1960.*

12. Mahorner, H., Castleberry, J. W., Coleman, W. O.: Attempts to restore function in major veins which are the site of massive thrombosis. *Ann. Surg.* 146:510, 1957.

13. Bradham, R. R., Lee, W. H., Jr.: Dissolution effect of human fibrinolysin on preformed venous thrombi in dogs. *Surg. Gynec. & Obst.* In Press.

*The importance of porosity in vascular prosthesis,* by R. R. Bradham (Charleston) *Am. J. Surg.* 100: 557, Oct. 1960.

Segments of the abdominal aorta of adult mongrel dogs were replaced with compressed Ivalon (polyvinyl alcohol) tubes to determine the importance of porosity in vascular prostheses. The status of these grafts was determined at varying periods of time postoperatively and the results were summarized. The lack of interstices through which fibrous tissue could infiltrate the wall of the prosthesis resulted in the formation of a hyalinized intimal lining which was

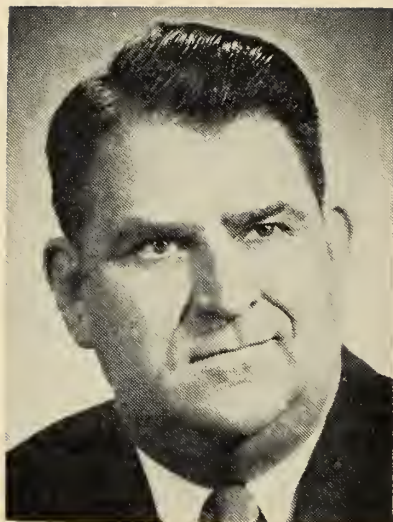
slowly replaced by fibrous tissue which grew in from the ends of the graft.

This hyalinized membrane was fragile and damaged easily. The outer fibrous covering, the graft, and the intima could be easily separated. It is concluded that porosity is an important feature of a vascular prosthesis as it allows early fixation of the graft and early fibrous organization of the intima. Ivalon seems not to be the most suitable prosthesis from this standpoint.

R. R. B.

JANUARY, 1961

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## President's Pages

Last month the President's Pages contained part of a special report to the Delegates concerning re-registration of physicians. This month we are publishing the rest of that report, since it blends in so closely with one of our projects for the present year.

It is not the purpose of this letter to criticize the societies who have opposed re-registration and anything appearing here should not be interpreted in any way as an attempt to censor them. Each society has a perfect right to its own opinion, and it may very well turn out that they are correct. In asking for a reconsideration they may virtually be doing our Association a great favor. This

is certainly so, if as they surmise, a majority of members of our Association are not in favor of re-registration in spite of the affirmative action by the majority of the Delegates.

I cannot help but believe that if we had been better informed on this issue when it came up for discussion, that a decision — either the same as was reached, or the opposite — would have more nearly reflected the true feeling of the Association and done away with the misunderstanding that this has now brought forth. The reason that I am commenting on this at all is to use it as a sort of "spring board" to re-emphasize a few points brought out in my first President's Page last summer. You will remember, in these letters I pointed out the sovereignty of the county societies and the responsibility that these societies have in making our State Association strong. One of the points emphasized at that time was the fact that the Delegates from each county should be fully *informed* about the issues to be considered at the meeting of the House of Delegates.

The potential hazard behind circumstances such as this is apparent when we realize what might happen from year to year if an issue, supposed to have been settled by the majority of the House of Delegates, is not taken as the policy of the Association, but is subject to change before the next meeting of the House. When will we ever know exactly where we stand on any given issue? How can we make public announcements or public policies if we do not know that we have the backing of our component societies after it has once been passed by our official governing body? It is imperative that this type of internal conflict be settled once and for all in our House of Delegates, and particularly so in policies affecting the general public. We should know the will of the majority before an issue is passed, not find out afterwards.

After considerable thought on the matter, it is felt that in order to keep such happenings at a minimum, and that we might always present a united front in our dealings with the public and the Legislature, it is incumbent on each of us as Delegates from our respective county societies to inform ourselves of the issues to come up prior to the meeting of the House of Delegates.

Certainly any issue, which is controversial, should be discussed thoroughly with members of our County Society beforehand, so that we will know exactly how they feel when we represent them at the State meeting.

The question naturally arises as to how this information can best be passed on to Delegates beforehand. Your attention is called to the following sources:

- (1) Prior to a State Convention, the South Carolina Medical Journal publishes its annual "Convention Number", which contains the reports of all the standing and special committees which have been appointed to work on various problems during the year. These reports include, recommendations and resolutions, which will be presented from these committees, and will be considered by the House of Delegates after having been studied by the reference committee, to which they are referred at the Annual Meeting.

These reference committees are very important. They are used because it is easier for a small committee to study a recommendation and get the real meat. Similarly, it is

more practical to point out the flaws and suggest amendments, or deletions, so that the final draft will be acceptable to the House when presented. It is unfortunate that many delegates and members of our Association do not take advantage of appearing before a reference committee when a bill in which they are interested is being considered. The delegate has a real opportunity for discussion and to influence passage one way or another by stating his views with the committee, and before it is presented to the House in its final form. I would urge each of you not to forget about these committees. A close study by the Delegate of all the reports contained in the *Journal* will help considerably in his understanding and give him a clue to what discussions probably will take place at the Association meeting.

It might be well that, in addition to reports which are included in this special issue of the *Journal*, reference could also be made to other committee reports which have not been included, or which may be amended by supplemental reports at the meeting. The delegate would be given notice that on these particular questions, he should seek additional information from the Chairman of the Committees, or from officers of the Association about any item in which his society is particularly interested.

- (2) Council often has certain recommendations to be brought before the Association, which may or may not be included in the Convention issue of the *Journal*. It would be well for each Delegate to consult with the Councilor from his individual district and find out what particular points might be brought up which would require his special attention, or might be particularly interesting to his society.
- (3) The House of Delegates also sits as the corporation of Blue Shield. Therefore, it would be extremely helpful for delegates from each county to acquaint themselves with any particular Blue Shield problem which their society has had to cope with during the year, and find out from the Blue Shield representative about any special legislation or recommendation which might be contemplated. Blue Shield is our baby, the doctors' own plan, and it is one of the most misunderstood of all the progeny of our Association. I think that this particular phase deserves special attention by all our delegates.
- (4) As I have stated in earlier issues of the *Journal*, it is my desire to meet with every county society sometime during this year before the State meeting. At these times I will consider it a privilege to be of any service that I can in answering questions or entering into discussion of any problem which might be of particular interest, concerning the current program of the South Carolina Medical Association, or any items which might be considered in the future.
- (5) Do not forget the officers of the Association. Remember that they will be glad to help with your problems at all times, and that we have special facilities for use at any time you should desire such aid.

The executive offices in Florence, under the very efficient administration of Mr. M. L. Meadors, can give you authoritative information on any subject concerning the affairs of S. C. M. A. or A. M. A. He has files on all past meetings of the House of Delegates for reference and an almost unlimited supply of information about A. M. E. F. — problems of the aging, public relations, medical legislation both State and National, and many other subjects. He will be pleased to have you call on him and will help in any way possible. The address of our Executive Secretary is — 309 West Evans Street, Florence, S. C., Telephone Mo. 9-8711.

Always remember your Councilor — He probably is your closest source of authentic information.

Dr. William Weston, 1515 Bull Street, Columbia, S. C., our Senior Delegate, and Dr. George Dean Johnson, 157 Pine Street, Spartanburg, S. C. will be glad to clarify any issues concerning action taken by A. M. A., and if you pose a query to them that might possibly be a little out of their line, Dr. Julian Price, of Florence, present Chairman of the Board of Trustees of A. M. A., can step in and fill the gap. We are very fortunate in South Carolina to have such an imposing group of representatives in the A. M. A. at our beck and call.

Dr. Joseph I. Waring, Editor of *The Journal of S. C. M. A.*, is also Chairman of our Public Relations Committee — he can be of invaluable counsel in many problems. Likewise, our Mediation Committee — Dr. Roderick MacDonald, 330 E. Main Street, Rock Hill, S. C., Chairman, may be of help to you at times.



Also, Dr. James H. Gressette, 920 Holly Street, Orangeburg, S. C., Chairman of Council; Dr. B. J. Workman, Pearson Street, Woodruff, S. C., Vice-President; Dr. J. Howard Stokes, 161 W. Cheves Street, Florence, S. C., Treasurer; Dr. Charles N. Wyatt, 301 E. Coffee Street, Greenville, S. C., President-Elect; Dr. Robert Wilson, 165 Rutledge Ave., Charleston, S. C., Secretary, are always on call to help in any way.

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*Problems in thyroid disease* by William H. Prioleau, M. D., Tri-State M. J. 7:14, Feb. 1960.

This is an abstract of an introduction to a Panel Discussion on Thyroid Disease. It was intended to give some direction to the proceedings, but by no means to preclude the introduction of other subjects.

Mild and border line cases of hyperthyroidism present diagnostic difficulties. They must be differentiated from anxiety neurosis, minor psychoses, emotional disturbances, and other symptom complexes grouped by Alvarez under the term "constitutional inadequacy". An elevation of the  $I^{131}$  uptake and of the protein bound iodine, particularly if both are present, is generally indicative of a hyperthyroidism. However, the absence of these confirmatory laboratory tests does not rule it out. In cases, not otherwise explained, a deviation from the normal health base line consistent with hyperthyroidism, and in the presence of increased density of the thyroid gland, constitute a sound basis for the diagnosis of hyperthyroidism in the absence of confirmatory laboratory tests. In making such a diagnosis, observation over a period of time may be necessary.

Antithyroid drugs generally induce a remission of hyperthyroidism, however they are not generally used as definite treatment because the maintenance of the remission depends upon the continued use of the drug, with reasonable likelihood of complications, and the attendant enlargement of the thyroid gland. The most valuable use of this form of therapy is in preparing for operation patients with severe hyperthyroidism. Used in this manner the general condition of the patient is improved, however the technical difficulties of the operation are often increased by the hypertrophy of the gland and the increased vascularity and friability. To some extent these difficulties are reduced by the administration of iodine prior to operation.

In preparing the average patient with hyperthyroidism for operation, it is inadvisable to use an antithyroid drug. Iodine is the treatment of choice. It induces a partial remission of the overactivity and reduces the technical difficulties of the operation by causing the gland to go into a resting phase. It would appear more physiological to induce a resting stage of the gland by the use of iodine rather than cause a

marked hyperplasia by administering an antithyroid drug.

The use of the term "euthyroid" to indicate a remission of the hyperthyroidism is unfortunate as, according to its derivation, the term would imply a healthy state of the thyroid gland. Certainly a patient with a nodular goitre, causing tracheal obstruction, should not be designated as "euthyroid" even though the hormonal function of the gland is normal. It is preferable to use the terms normal, hypo and hyperfunction.

Operation for the treatment of hyperthyroidism and nodular goitre has proven satisfactory over a period of many years. It is attended by the usual disadvantages of an operative procedure, as well as some risk of recurrence, and injury to the recurrent nerves and parathyroid bodies. Only by operation can a satisfactory tissue diagnosis be obtained.

Treatment with radioactive iodine will almost invariably cause a remission of hyperthyroidism. In deciding upon its use consideration must be given to the possible induction of a permanent hypothyroidism, the freedom from recurrent laryngeal nerve and parathyroid injuries, the presence of a carcinogenic factor, and in particular the absence of a tissue diagnosis, with the risk of overlooking a malignancy. It is generally agreed that radio-active iodine should not be given to women in the child bearing period on account of the danger of causing mutations in their offspring.

Should thyroid extract be prescribed to effect weight reduction? Should it be prescribed on the basis of laboratory tests in the absence of the more or less characteristic signs and symptoms of hypothyroidism? We think not. How can the dosage be determined? We think by clinical trial.

Does the microscopic picture of the thyroid gland indicate its functional status? How is it affected by medication? Of what value is frozen section examination in the diagnosis of carcinoma of the thyroid? What is the nature of subacute granulomatous thyroiditis (deQuervain's disease)? Is Hashimoto's (lymphoid) thyroiditis related to Graves' Disease? We hope that the panel discussion will shed light on these and other problems.



# Editorials

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## THE UNGRAVEN IMAGE

Public Relations counsellors and advertising authorities are much given to speaking of images nowadays, and not infrequently they confront us with the supposed fact that the image of the physician in the public eye has changed very materially and very much for the worse. Recently a very prominent public affairs counsellor shook a medical audience out of its seats by stating that: "The public thinks of you gentlemen as an assortment of whiskey-drinking, golf-playing, Cadillac-driving characters who get cash rebates from pharmaceutical firms." While this gives us no very high opinion of the public which Mr. Eley considers authoritative, nor of the doctors who are categorized by this public, it still seems possible that that sort of image might have been fixed in the minds in that certain element of the public which absorbs the sensational, often libelous, accounts of physicians which appear in popular novels and in feature articles in the lower classes of the public press; perhaps even in some of the higher class magazines which are supposed to appeal to the intelligent.

Another critic believes that medicine will not accomplish much towards changing any sort of image by the expenditure of great sums of money to create so-called good public relations. He emphasizes, as most of us have thought for some time, that it is up to the individual doctor to convince people that he does not have the kind of character which has been pinned on him by Mr. Eley. Furthermore, it seems that it is necessary that the doctor not only impress his own patients with his better qualities — and in most cases his own patients do not need to be impressed or they would not be his patients — but that it must be his own personal responsibility to spread among as many people as he can the true picture of the doctor and medicine in general.

Still another critic feels that despite the many advances in medical science, "doctors as a group appear to be unaware of social, economic and political demands moving like

a whirlwind toward them." He believes that unless doctors themselves take over the responsibility of developing new programs in health care that someone else inevitably will do the job for them, and will do it in a way that would probably not be agreeable to the physician. In a survey conducted among groups of varying types of people, he found that there was the feeling that doctors were getting more impersonal, that they were more concerned about their fees than about taking time to explain the illness and its accompanying difficulties. These people feel that even though the general practitioner still survives in considerable numbers, he is less of a family physician than ever before, because he does not take the time nor make the effort to include in his specific concern for the patient's illness some interest in the financial and social matters which it involves. This feeling of disappointment progresses into an actual feeling of hostility with some. Thus with the decreasing sentiment for the desirability for the old time family doctor, there comes an increasing feeling that maybe the Government can devise a program which will give people all that they get from the current independent physician.

These are not soap-box orators talking to a crowd of idle listeners. They are people who have thought out these matters, and they are honestly concerned with the welfare of the medical profession and the public both. More of such advice is welcome to those who have put any thought on the problems. Unfortunately there still exists a tremendous amount of almost impregnable apathy among a large segment of our medical population. These people have no fear of waking up some morning to find that what they have considered as impossible has actually become a fact.

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## MEDICINE AND THE FUTURE

Too many professors have tried to impress us with their particular ideas as to what the future holds for our profession. What we need is a down to earth realization of what our

profession is and what are its aims. If any man has gone into the study of medicine with any idea beyond the hope of being a help to others, he has made a bad mistake. There are certainly some rotten apples in the barrel, and their influence is bad, but with the breastplate of righteousness and the shield of faith, we can turn aside the inroads of contamination and extrude the foreign and obtrusive irritant from our midst or entirely surround it as the pearl does the grain of sand. This must be done for the good of the order and the welfare of mankind.

The ministry excepted, medicine is the grandest of all professions, offering more hardships and more opportunities than all the rest. It is dedicated to the betterment of the human race, to the attainment of all that is best for the body and the mind of man, and it ultimately aims at its own extinction. Too many physicians have been inclined not to encourage the flower of our youth to go into their profession. This, I believe, has been with a sincere desire not to influence their sons or their friends' and acquaintances' sons to get into something that may be beyond their ability and comprehension. However, the time is upon us when, in spite of government threats, of popular ill will, of uncertainties and perils, we should urge the best of our youth to undertake a courageous and difficult course, for it is obvious that enough young men of desirable quality are not inclined to the study of medicine. True, existing medical schools are full, but are they full of the best available material?

Despite all one hears as to the future of our profession, the imminence of federal control, the fallen prestige of the physician in his community, the criticisms of our failures, the lowering of ethical standards, and the mercenary attitudes of some of our less desirable colleagues, the medical profession still presents to the youth of today a challenge which cannot be surpassed in its offer of gracious and humanitarian service.

The young doctor of today stands on the threshold of an opportunity such as the world has never seen before. It is limitless in scope, infinite in possibilities. No youth should be discouraged in his desire to enter into this study. Its rewards are without parallel in the

realm of things of the spirit, and this is the realm of the future in all things. Materialism will perish and man will emerge in the form and character which God originally and always intended, and the true and loyal and dedicated doctor of medicine will be secure, not in worldly wealth, not in social prestige, not in the eminent domain of politics or power, but in the hearts of men, his patients and his friends. This is the future of medicine.

J. W. J., Jr.

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#### THE ALLEGED DANGERS FROM ATOMIC FALLOUT

Communist Russia is at war with the United States, in an all-out war to the death. Their leaders have stated this so often that documentation seems unnecessary.

The war is conducted on various fronts which include the military — both in brush fire-fighting and in atomic preparation; the economic, in which they direct concentrated warfare against particular American industries; the ideological, in which they endeavor to subvert the thinking of national leaders and student intellectuals in order that populations may be misled; and the religious through subversion amongst recognized leaders in this sphere.

Ideological warfare includes brainwashing. We ordinarily think of this as something which the Russians do to their prisoners on the other side of the world. They also do it to us in the United States.

One of the best examples of brainwashing the American people is the emotional storm currently being raised over the testing of atomic bombs. Dr. Linus Pauling, a professor at one of the universities in California, a Nobel prize winner, and American Rationalist of 1960 presented to Congress a petition containing thousands of signatures from scientists around the world claiming that the radiation danger from atomic fallout was such that the program for further testing of atomic weapons should be abandoned immediately and permanently. As you know, Dr. Pauling has recently been testifying before a Congressional committee and has refused to state how he gathered the signatures of so many thousand scientists so quickly. Those who agree with Dr. Pauling

allege that the radiation hazards come in two categories, the production of damage to the bone marrow resulting in leukemia and such disorders, and damage to the sex glands resulting in deterioration of the race. (The immediate damage from being blown up by a bomb is only mentioned in passing since it is obvious.)

What are the facts? The following information is given from the current medical literature.

1. Dr. Shields Warren writing in the *Bulletin of the American College of Surgeons* for August 1960:

<i>Natural Background Radiation Varies</i>	
Boston	3.5 r in 30 years
Denver	7 r in 30 years
Some of India & Brazil	50 times background radiation of Boston.

Comment: If the increment in radiation due to atomic bomb testing does not exceed the background radiation, it is probably not dangerous. The present fallout is only a fraction of the background radiation. One pound of uranium contains energy equivalent to that of 1400 tons of fuel oil. In view of the power requirements of our modern civilization, such a source of energy cannot be lightly abandoned.

2. Dr. G. B. Forbes writing in *Pediatrics* for June 1960 states as follows:

Estimated World Wide Dosages		
Source	30 year dose to gonads	70 year dose to marrow
Natural— Cosmic rays, K40, etc.	3 r	7 r
Man made— Diagnostic X-ray, etc.	0.5 to 5 r	7-plus r
Atomic bombs (tests cease in 1958)	0.01 r	0.2 r in milk-drink- ing countries 0.9 r in rice-eating countries.

Dr. Forbes states in summary that the gonadal exposure from TV is about the same as that from the fallout which, in turn, is about that to be expected from dental x-rays over a person's lifetime.

## Estimate of Occurrence of Leukemia

<i>Natural Occurrence</i>	<i>From Fallout</i>	
	<i>Tests stop in 1958</i>	<i>Tests continue indefinitely</i>
150,000/year	0-2000/year	0-60,000/year.

Dr. Forbes comments: The peaceful use of atomic energy will in time produce fully as great a potential hazard as the bomb-testing program.

3. Editorial comment in *Science* for July 1, 1960:

The accumulated dose of radiation from the testing of atomic bombs over a 30 year period roughly equals 1% of the background radiation, or an amount equal to that from TV sets or luminous watch dials.

From a consideration of the above statistics it would appear that the radiation fallout is measurable and definite but that the effects of the same at the present time are of undetermined and very likely negligible importance. This would be particularly true of the underground testing of tactical atomic weapons, from which there is essentially no fallout since the explosions occur deep under ground.

The United States was testing atomic weapons because we need them to protect us from the hordes of our enemies. The Communist Party at the present time controls one billion people out of a world population of two and three-quarters billion. The population of the United States is approximately 200 million. It is obvious that regardless of the quality of our manpower, as manpower it is insufficient to match the Russians. We need good mechanical devices to assist us, both as deterrents to war and as weapons in the event of war. Undoubtedly atomic weapons are the most powerful in the world.

What is the danger if we are overcome by the Russian Communists? The Communists in Russia have killed approximately one hundred million Russians. (Basis of computation: Russian population under the Czars was doubling every 40 years. Russian population when the Communists took over in 1917 — 140 million. Russians now claim population of 180-200 million.) The Chinese have killed approximately 40 million Chinese. The Communists have formerly stated repeatedly that when



they took over the United States of America it would be necessary for them to liquidate one-third of the population, or fifty to sixty million people. They did not mean that they would kill this many in war or conquest; they meant that following their control of this country, they would need to destroy this many people because of their capitalist environment and background. They do not regard this as murder, it is simply scientific animal husbandry. As far as each and every one of us is concerned and all of our families, to us it means our death.

We, therefore, are faced with a potential danger as regards leukemia of 0 to 60,000 cases per year if we continue testing atomic weapons indefinitely. We are told that the peaceful uses of atomic energy, about which Dr. Pauling and his associates have not complained, will in time produce fully as great a potential hazard as the bomb-testing program. The alternative to the exploration of atomic power for war and peace is the literal destruction of fifty to sixty million Americans in the foreseeable future.

To a disciplined and educated mind the

choice between these two alternatives should not be difficult.

Thomas Parker, M. D.

Delivered before the Congressional Delegation, Columbia, S. C. November, 1960.

### ILLEGITIMACY

An editorial in the *Bulletin of the Pee Dee Medical Association* has something to say about the prevalence of illegitimacy in this state, and about what Louisiana has done to try to reduce the same growing problem. The method there has been to declare it a felony to have more than one illegitimate child and to make the parents of additional illegitimate child liable to fines or imprisonment.

Perhaps the same sort of legislation would accomplish much in this state, and what might accomplish perhaps more would be to see to it that the doles which are handed out by the welfare departments would not extend beyond the first illegitimate child. Nowadays in the minds of many of the class who are most productive of extra-marital offspring there is the thought that no great harm is done to add to the number as long as "the welfare" is going to provide the wherewithal to support the growing number of little bastards.

### THE BENEVOLENCE FUND

A meeting of the Directors of the Benevolence Fund was held at the home of Dr. O. B. Mayer, Columbia, S. C., on November 24, 1960.

The Chairman reported the present status of Fund as follows:

Temporary allotment from the S. C.

Medical Association	\$500.00
Contributions	50.00
	<u>\$550.00</u>
Allotments to Beneficiaries	300.00
Balance in Fund	<u>\$250.00</u>

The Chairman also reported that he had learned that the beneficiaries needed greater assistance. A motion was passed increasing the allotment to each of the needy physicians.

At a previous conference it had been decided that a set of rules for the guidance of the Directors and for the information of the members of the South Carolina Medical Association was needed. The following "Rules" submitted by a special committee were adopted:

Rules for Operation of Benevolence Fund  
Adopted by Directors Oct. 24, 1960  
Directors

O. B. Mayer

Thomas G. Goldsmith

W. Atmar Smith, Chairman

1) The Directors shall be responsible for the administration of all monies entrusted to their care. It shall be their goal to establish a "Permanent Fund" from which only the interest may be used. It being understood that in the beginning this may not at first be possible.

2) The Board of Directors shall determine who shall be entitled to assistance or relief. The Directors shall have exclusive control in designating beneficiaries and shall determine the sum to appropriate for each. The names of the beneficiaries, for reason of delicacy, shall not be published and shall be known only to the Directors and ex-officio officers.

3) The Treasurer of the Association shall be custodian of all Benevolent Funds and shall keep them entirely separate from all other Association accounts. He shall assist and advise with the Directors on all matters concerning investments for the Permanent Fund, and carry out their wishes in these matters. He shall pay out funds from this account only on certification of the Directors.

(Resolutions House of Delegates, May 18, 1960)

4) The Fund may be augmented by voluntary con-



tributions of members, or groups of physicians, by County Medical Societies, by Woman's Auxiliary, or by other interested bodies or individuals. Laymen should not be solicited for contributions.

5) Applications for assistance may be made to any officer of the Association or to one of the members of the Board of Directors of the Benevolence Fund.

6) Applications may originate with the needy eligible person by a nearby physician, by a member of the Woman's Auxiliary of The South Carolina Medical Association, or a friend conversant with the financial difficulties of the individual, or a welfare worker. In case of emergency, aid will be immediately given awaiting usual reports.

7) The application should state the income of the proposed beneficiary, the possible resources available, along with the age, sex, race, and whether a physician or a wife or child of a deceased or disabled physician and any other data that might be helpful to the Directors in reaching a decision in the case.

8) On the basis of the facts obtained from the application and from other available sources the Board of Directors shall determine the specific need and designate the amount of assistance to be appropriated from the fund. They shall then notify the Treasurer to pay the amount decided upon directly to the beneficiary or some welfare agency. No commitments shall be made for more than one year. Reconsideration of the application will be given if the need still exists.

9) The Directors may find it helpful to utilize the services of State and County Welfare Departments for obtaining information concerning an applicant. Where this can be done without embarrassment and in a confidential manner this facility should be employed.

10) The Chairman shall keep a record of all of the transactions and activities of the Board during each year of operation transferring them to the permanent files of the Association at the end of the fiscal year.

11) He should submit a report to Council at its annual meeting.

12) The Directors shall meet annually and at such times as deemed necessary by the Chairman.

13) It shall be the duty of the Board of Directors to keep the membership of the Association and members of the Women's Auxiliary informed of its objectives and its activities through *The Journal*, the "News Letter," and talks at medical meetings in order to enlist the interest and support of members.

14) The Directors of the Fund should cooperate with the local Medical Benevolence Societies in Spartanburg and Charleston in rendering assistance to

the medical indigents there, and all other local societies that have a Benevolence Plan.

In order to obtain more stability and certainty about the amount of money available for distribution to qualified beneficiaries a motion was passed directing the Chairman to propose to Council at its October meeting that the Benevolence Fund be assigned the interest or a substantial portion of the assets of the State Association under their control for two or three years until the Fund could be built up from other sources. He was also requested to ask Council to permit the Treasurer to add to his Annual Statement "Contribution to the Benevolence Fund." No amount being stated. He was instructed to emphasize that the Directors disapproved any assessment; it should be purely a voluntary gift.

The Chairman was also directed to write to the President of each County Society and County Auxiliary informing them of the establishment of the Benevolence Fund, emphasizing its purpose and appealing for cooperation and assistance in making the undertaking worthwhile.

Note—The following letter was received by the Chairman November 4, concerning allotments to the Benevolence Fund.

November 3, 1960

Dear Billy:

At the meeting of the Council of the State Medical Association on October 26, 1960 a motion was passed recommending that \$800.00, in addition to the \$500.00 previously authorized, be turned over to your committee for use during the balance of the year 1960. This will be paid out of the General Funds of the Association.

In addition to this, the budget for 1961 includes \$1,000.00 to be allocated to the work of your Committee.

Sincerely,  
Robert Wilson, Secretary

Apparently no action was taken on the request to alter billhead.

Present Status of Benevolent Fund:	
Balance	\$300.00
Allotment State Medical Association	800.00
	<hr/>
	\$1100.00
November Allotment to Beneficiaries	125.00
	<hr/>
	Balance \$875.00

Directors of Fund  
W. Atmar Smith, Chairman  
O. B. Mayer  
Thomas G. Goldsmith



*attains  
sustains  
retains*

*extra  
antibiotic  
activity*

# DECL

## *attains* activity levels promptly

**DECLOMYCIN** Demethylchlortetracycline attains — usually within two hours—blood levels more than adequate to suppress susceptible pathogens—on daily dosages substantially lower than those required to elicit antibiotic activity of comparable intensity with other tetracyclines. The average, effective, adult daily dose of other tetracyclines is 1 Gm. With DECLOMYCIN, it is only 600 mg.

## *sustains* activity levels evenly

**DECLOMYCIN** Demethylchlortetracycline sustains — through the entire therapeutic course, the high activity levels needed to control the primary infection and to check secondary infection at the original—or another—site. This combined action is usually sustained without the pronounced hour-to-hour, dose-to-dose, peak-and-valley fluctuations which characterize other tetracyclines.

TETRACYCLINE  
ACTIVITY  
WITH  
**DECLOMYCIN**  
THERAPY

DOSAGE  
150 mg. q.i.d.

TETRACYCLINE  
ACTIVITY  
WITH OTHER  
TETRACYCLINE  
THERAPY

DOSAGE  
250 mg. q.i.d.

DECLOMYCIN—SUSTAINED ACTIVITY LEVELS

OTHER TETRACYCLINES—PEAKS AND VALLEYS

POSITIVE ANTIBACTERIAL ACTION

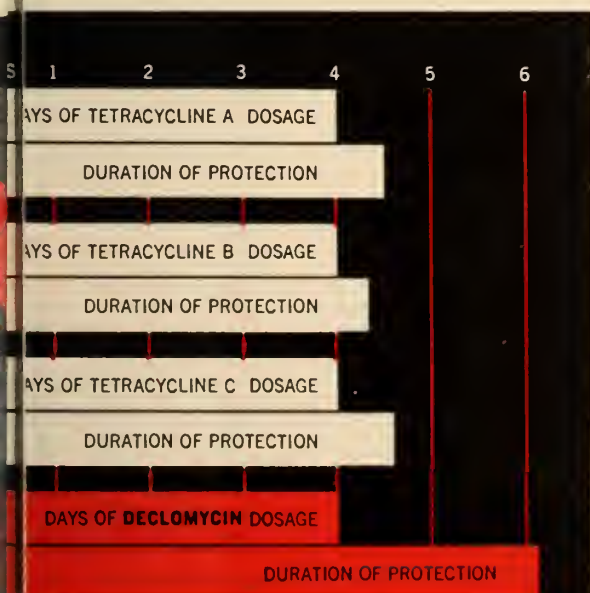
PROTECTION AGAINST PROBLEM PATHOGENS

# DECLOMYCIN<sup>®</sup>

DEMETHYLCHLORTETRACYCLINE LEDERLE

*Retains activity*  
levels 24-48 hrs.

**DECLOMYCIN** Demethylchlortetracycline retains activity levels up to 48 hours after the last dose is given. At least a full, extra day of positive action may be confidently expected. The average, daily adult dosage for the average infection—1 capsule q.i.d.—is the same as with other tetracyclines...but **total** dosage is lower and duration of action is longer.



PROTECTION AGAINST RECURRENCE

**CAPSULES**, 150 mg., bottles of 16 and 100. **Dosage:** Average infections—1 capsule four times daily. Severe infections—Initial dose of 2 capsules, then 1 capsule every six hours.

**PEDIATRIC DROPS**, 60 mg./cc. in 10 cc. bottle with calibrated, plastic dropper. **Dosage:** 1 to 2 drops (3 to 6 mg.) per pound body weight per day—divided into 4 doses.

**SYRUP**, 75 mg./5 cc. teaspoonful (cherry-flavored), bottles of 2 and 16 fl. oz. **Dosage:** 3 to 6 mg. per pound body weight per day—divided into 4 doses.

**PRECAUTIONS**—As with other antibiotics, DECLOMYCIN may occasionally give rise to glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis or dermatitis. A photodynamic reaction to sunlight has been observed in a few patients on DECLOMYCIN. Although reversible by discontinuing therapy, patients should avoid exposure to intense sunlight. If adverse reaction or idiosyncrasy occurs, discontinue medication.

Overgrowth of nonsusceptible organisms is a possibility with DECLOMYCIN, as with other antibiotics. The patient should be kept under constant observation.



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**ACTIONS OF THE HOUSE OF DELEGATES  
AMERICAN MEDICAL ASSOCIATION  
FOURTEENTH CLINICAL MEETING  
NOVEMBER 28 - DECEMBER 1  
WASHINGTON, D. C.**

Speaking at the Monday opening session, Dr. E. Vincent Askey of Los Angeles, AMA President, called upon the delegates to support not only existing AMA programs but also expansion of new programs necessary to meet the challenges of society. Dr. Askey assured the new administration in Washington of cooperation whenever and wherever possible but emphasized that the AMA will not change its policies merely for the sake of conformity.

*Scholarship and Loan Program*

The House of Delegates approved a scholarship and loan program proposed by the Special Study Committee of the Council on Medical Education and Hospitals, and also urged that there shall be local participation in the program at the state and county level. In commenting on the two-part program, the House approved the following statement by the reference committee:

"This proposed program will provide concrete evidence of the American Medical Association's sincere desire to attract increasing numbers of well qualified young people to enlarge the ranks of our profession. Your reference committee recognizes that the program is wisely designed to allow for its enlargement through the support of individual physicians and other groups. Your reference committee was impressed with the enthusiastic support of this proposal indicated during the course of the discussion. There was indicated a desire that in the final formulation of the administrative details of this program, provision be made for widespread participation by individual physicians as well as county and state medical societies. The program will clearly assist in securing highly talented individuals whose ability and leadership in all areas of medicine will be fostered and at the same time will bring needed financial assistance on a broad basis to medical students under a system in keeping with this Association's belief in individual responsibility."

*Foreign Medical School Graduates*

Meeting the problem of foreign medical graduates, the House of Delegates adopted a report which included the following statement:

"In order that those foreign physicians who have not yet been certified by the Educational Council for Foreign Medical Graduates might be given further opportunity to enhance their medical education, hospitals would be encouraged to develop special educational programs. Such programs must be of educational worth to the foreign graduate and must divorce him from any responsibility for patient care. Foreign physicians may participate in these programs until June 30, 1961, with approval of the Department of State so that their exchange visa will not be withdrawn before that time. This will also allow the non-certified foreign physician the opportunity to take the April,

1961, Educational Council for Foreign Medical Graduates examination."

*A.M.A. Dues Increase*

The House approved a Board of Trustee report which announced that a dues increase would be recommended at the annual meeting in June 1961. The report indicated that the amount would be not less than \$10 and not more than \$25 to be effective January 1, 1962. The Reference Committee asked the Board to consider an increase in the annual dues of \$20.00, to be implemented over a period of two years: \$10.00 on January 1, 1962, and \$10.00 additional on January 1, 1963.

The House suggested that these funds be used to inaugurate or expand a number of programs including:

1. Financial assistance to medical students.
2. Continuing education for practicing physicians.
3. Health advice to the lay public.
4. Medical research.
5. The expansion by the Communications Division of its program of faithfully portraying the image of the American Medical Association.

It is important, the House emphasized, that the Board of Trustees report recommending a dues increase be transmitted in essence to the grass roots level.

*Voluntary Health Insurance*

In place of a Board of Trustees report and three resolutions, the House adopted the following substitute resolutions:

"Whereas, It has been widely recognized that voluntary health insurance is the primary alternative to a compulsory governmental program; and

"Whereas, The public has shown its confidence in this voluntary system; and

"Whereas, Current social, political and economic developments compel a new and revitalized effort to make voluntary health insurance successful; and

"Whereas, the American Medical Association has consistently pledged itself to make available the highest type of medical care; therefore be it

"Resolved, that the House of Delegates direct the Board of Trustees and the Council on Medical Service to assume immediately the leadership in consolidating the efforts of the American Medical Association with those of the National Association of Blue Shield Plans, the American Hospital Association and the Blue Cross Association into maximum development of the voluntary, non-profit prepayment concept to provide health care for the American people; and be it further

"Resolved, that similar leadership be undertaken to coordinate the efforts of private insurance carriers through conferences with their national organizations; and be it further

"Resolved, That, where feasible, efforts be made to cooperate with representatives of other types of medical care plans, other professional groups, and representatives of industry, labor and the public at large."

*Health Care for the Aged*

The House reaffirmed the Association's support of the Kerr-Mills Bill, which was passed last summer,



and its opposition to any legislation involving the use of the OASDI mechanism for medical aid to the aged. The delegates also urged all state and local medical societies to cooperate with the appropriate state officials and provide leadership in implementing the provisions of the Kerr-Mills Bill.

In connection with health care for the aged, the House suggested further experimentation in home care programs, homemaker services and visiting nurse services. The delegates also recommended an increased emphasis at all levels of medical education on the new challenges being presented to physicians in the health care of older persons.

#### *Polio Vaccine*

The House agreed with a Board of Trustees report which said:

"In view of the fact that oral polio vaccine will not be generally available in sufficient quantity in 1961 for any large scale immunizing effort, the Board of Trustees of the AMA strongly recommends that the medical profession encourage the widest possible use of the Salk vaccine for the prevention of poliomyelitis. The Salk vaccine has been proved to be effective and since there are still many segments of the population not immunized against poliomyelitis every effort should be made to encourage the general public to take advantage of the Salk vaccine without delay."

The Board report was amended to suggest that a proper committee be established by the AMA to study the problems involved in administration of the new oral polio vaccine and to establish guides for physi-

cians to follow when they are approached by various groups and asked for their support in administering oral polio vaccine.

#### *Miscellaneous Actions*

In considering a wide variety of resolutions and annual and supplementary reports, the House also:

Approved continuing study and periodic re-evaluation of the trend toward locating *physician's offices* in or adjacent to hospitals;

Directed the Committee on Medical Care for Industrial Workers to carry out its duties as previously instructed and to prepare guides for physician relationships with *medical care plans* in conformity with the clear policies already laid down by the House of Delegates;

Approved a set of guides relating to drug expenditures for *welfare recipients*;

Asked the Board of Trustees to study the question of blood replacement responsibility and also the matter of establishing health insurance fee schedules for *surgical assistants*;

Urged the Board to make every effort to reduce the number of physicians who are non-dues-paying members and approved a three-year study report on the relationships of *physicians not-in-private-practice* to organized medicine;

Requested the Board to present a completed *retirement* and *disability* insurance program for AMA members at the June, 1961, meeting, and

Agreed that the *General Practitioner of the Year* Award should be continued as at present.



## BLUE CROSS . . . BLUE SHIELD



In October, the Honorable William F. Austin, Chief Insurance Commissioner, held a hearing because of a request by Blue Cross to increase the rate of a certain category of non-group enrollment. Joe Cain, as President of the Medical Association, and I were invited as representatives of Blue Shield although that organization was not directly involved. Mr. Austin was upset as we all should be by the increase in hospital cost to the patient.

In South Carolina utilization has increased from 754 days for each 1000 Blue Cross members in 1948 to 1176 (est.) in 1960. This is an average increase of 4.5% per year. The national average for all plans was from 883 days for each 1000 members in 1948 to 1043 in 1960 or an increase of 1.5% per year. Since 1951 the South Carolina Plan's days per thousand have exceeded the national average for all plans by about 9%.

Only two people control utilization—the patient and his doctor. It was pointed out to the Commissioner and his staff that some patients insist on going to a hos-

pital no matter how trivial an injury or mild an illness may be. Some patients are so insistent that if one doctor will not admit them to a hospital, they will seek and usually find a doctor who will. It was also pointed out that the S. C. Medical Association has adjudication committees over the state who help control the grossly obvious abuses such as 72 days in the hospital for chronic influenza. It was also pointed out that there is a real honest difference among physicians about how long a patient should stay in the hospital. As an example, some surgeons repair a hernia in a child today and let him go home tomorrow. He may return to the surgeon's office for dressings and suture removal. Other surgeons keep the child in the hospital with him running up and down the halls for eight to ten days. At the Children's Hospital in Philadelphia several thousand children have had a herniorrhaphy in the morning and dismissed the same afternoon. A subcuticular stitch is used and the only dressing is an application of collodion to keep it dry. No one, least of all me, is trying to tell a surgeon how to practice

but it seems high time that all of us should make an earnest effort to reduce unnecessary hospital days.

Another example pointed out to Mr. Austin is the patient that is in the hospital for study. He goes in Tuesday (this is an actual instance). He has cardiogram, cholesterol, BUN, blood sugar, sed. rate, gall bladder x-ray, examination and G I series. On Friday his doctor decided maybe the man should have a barium enema. That isn't done except in emergencies on Saturday so the patient better stay over till Monday. He's in his bathrobe and walks all over the hospital. The doctor tells him he may spend the day at home Sunday, but be back in Sunday night by 7 P. M. The patient is in a \$20.00 a day room. Some insurance company or Blue Cross pays for those two days and all of us pay the insurance premium of Blue Cross Plan. We physicians must stop that type useless hospitalization. There are some tests that require hospitalization but the vast majority do not. I think we should all consider these points before we admit a patient for any purpose.

Mr. Austin was reminded that in industrial areas it is impossible for a convalescent patient to be cared for at home at times. If the husband is sick or has had an operation, his wife is probably working and cannot afford to stay home to nurse him. Mr. Austin is mindful of all these all too obviously necessary extra hospitalization days, but he feels as we all do that physicians should concentrate on making efforts to reduce not only extra, unnecessary days, but also unnecessary admissions. It would seem that the medical service committee in large hospitals could make a study of the many unnecessary admissions and days of hospitalizations. If all doctors were as loathe to admit patients to the hospital as the rest of the doctors in the nation are and even if we had fewer days of hospitalization than the remainder of the nation, we would still have some patients—a good many—who would insist on hospitalization when unnecessary. In an effort to publicize the increased utilization and to try to educate our hospitalophile patients, Mr. Austin said that he intended to have a public hearing on this subject vital to all of us. Blue Cross representatives as well as we doctors heartily endorsed the idea. The more publicity there is on this subject the easier it will be for us to restrain our patients for useless admissions and excessive days in the hospital.

Our insurance commissioner has a tremendous job and has not been able yet to effect plans for a public hearing. In the meantime it behooves all of us to make every effort to reduce not only admissions but also unnecessary days in the hospital. I know that our doctors are as competent as those in any other state. I think we have not applied ourselves to this important area of medical economics. We can't control inflation, we cannot control to much of a degree hospital cost, but we can control to a large extent admissions and length of stay in the hospital.

Large medical centers are already doing so. Recently, a child was operated upon out of state for repair of a congenitally absent auditory canal. Cartilage was removed from a rib and used to fashion a canal. The child was in the hospital three days. The patient stayed in a motel and was taken back to the surgeon's office daily for dressing. This makes sense and we should apply our thoughts and efforts along these lines. If federal medicine comes it will be because we as physicians have been lax in doing our duty to see that medical care remains within the ability of the patient to pay. Cost of hospitalization is another important phase of our medical care. While utilization has increased in South Carolina by 55.9% in 12 years, hospital costs have increased 120% from \$9.05 per diem in 1948 to over \$20.00 per diem in 1960. Inflation has taken its toll, instruments, services, food, and, of course, professional as well as untrained help takes the largest increase. People cannot afford to stay in the hospital unnecessarily any longer. It's too expensive. Our hospitals are concerned and are making efforts to concentrate nurses where the sickest patients are, have two way communication with the patient to save steps, have clerks on the floors instead of graduate nurses, have practical nurses, gray ladies, etc, anything practical to cut down on the demand for expensive and scarce professional help. We as physicians must help in all these projects. Indeed in many instances they are instigated by physicians. We must continue to devise, think of new ways to stop unnecessary admissions and to reduce unnecessary days in the hospital. Can you think of anything worse than paying \$40.00 for two days in the hospital over the week-end? That's not my idea of a happy holiday and I don't think it was the patient's either.

George Dean Johnson, M. D.



*Forty pints of blood—five gallons—have been donated to the Red Cross by Sp 5 Mendle T. Hoffman, a member of the 446 General Hospital, USAR, in Columbia, S. C. Hoffman is the fifth Columbia to become a member of the Five Gallon Club. Mrs. Lillian Melonas, an American Red Cross nurse at the Blood Center, is shown with Hoffman as he makes his 14th donation. Hoffman, a lab technician in the 446th, has given fourteen of the pints of blood in the name of the 446th. His unit is the largest USAR unit in South Carolina.*

# Correspondence

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Dear Dr. Waring:

In the November '60 issue of the Journal, you carried an announcement concerning the American Society of Diagnostic Radiology. Since this organization is unknown to those of us engaged in the practice of Radiology, I took it upon myself to obtain further information, copies of which are attached for your consideration.

This organization appears to me to be of those groups capable of undermining the professional standing which radiologists have for years been trying to establish and maintain. It is obvious that anyone who joins this Society can then profess to be quite proficient in diagnostic radiology, by either implication or direct statement.

I do not feel that it is in the best interests of organized medicine for such claims to be condoned. Obviously, anyone owning a fluoroscope and who joins this organization can imply that he is competent and qualified to do diagnostic radiology. No man can serve two masters, and those of us who have spent the required years of hard work and training in radiology resent the assumption of capability of others who merely adopt, often without adequate controls and skill to preserve the well being and safety of patients and personnel in their offices, x-ray equipment to supplement their major line of medical practice. They are doing a disservice to the profession and their patients.

This type of organization has no more justification for its existence than would an "American Society of Childrens Practitioners", or an "American Society of Chest Examiners," etc., if membership is merely predicated upon treating children or examining the chest, as a part of practice.

Yours very truly,

George W. Brunson, M. D.  
Secretary-Treasurer  
S. C. Radiological Society

The announcement was published for the information of those who might be interested in the organization, of which the editor had no knowledge. Copies of the constitution and by-laws sent to him by Dr. Brunson lead him to believe that the Society should be well investigated before anyone commits himself to membership.

*The Journal* does attempt to restrict its material to sound medical matters. God forbid that it should be thought to endorse or condone every statement in its pages. Its function is to inform, not necessarily to judge.

*The Journal* would be glad to hear more on the subject of how completely the use of radiologic equipment should be restricted to the pure radiologist from the standpoint of practicality and availability.

The Editor

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# News

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## SURGEONS MEET AT GREENVILLE

The South Carolina chapter of the American College of Surgeons met in Greenville November 4-5. Included in the list of speakers for the two-day session were Dr. William Bomar, senior surgical resident at Greenville General Hospital, whose topic was "Cardiac Arrest"; Dr. Kenneth M. Lynch, Jr., professor of urology at the Medical College of South Carolina, "Acute Gangrenous Cholecystitis Following Unrelated Surgery"; and Dr. David Anderson, resident orthopedist at Shriners' Hospital for Crippled Children, "Osteoid Osteoma."

New officers elected were Dr. Kenneth M. Lynch, Jr., of Charleston, succeeding Dr. J. Robert Thomason of Greenville as president; Dr. William Cantey of Columbia, vice president; and Dr. R. R. Bradham of Charleston, secretary and treasurer.

Named to the council were: Dr. George McCutcheon of Columbia; Dr. F. E. Kredel of Charleston, Dr. Roderick McDonald of Rock Hill, Dr. William Brockington of Greenwood, and Dr. J. Robert Thomason of Greenville.

Dr. Paul H. Garrison has announced the opening of an office in the Medical Arts Building, Greenwood, South Carolina, for the practice of otolaryngology and maxillofacial surgery.

Dr. Garrison is a graduate of the Medical College of South Carolina and completed one year's rotating internship at The Spartanburg General Hospital, in 1955. He did two years of general practice in Greenwood before returning to Charleston for one year's training in otolaryngology. The next two years were spent at the Tampa Municipal Hospital, Tampa, Flor-



ida, as resident in otolaryngology and maxillofacial surgery. Upon completion of these two years Dr. Garrison did a 6-weeks fellowship with Dr. J. Brown Farrior in otolaryngological surgery at the St. Joseph's Hospital, Tampa, Florida.

#### DR. QUINN NAMED

Dr. Robert Quinn has been re-elected president of the Georgetown County Medical Society.

Other officers are Dr. James Forrester, vice-president; Dr. Lide Williams, secretary-treasurer.

Chosen as delegates to the South Carolina Medical Society Convention were Dr. Harry Tiller as delegate with Dr. Forrester as alternate.

#### CLINIC AT PENDLETON

A modern medical clinic has been placed in operation at Pendleton. Dr. Charles R. Griffin and Dr. Jimmy Hellums are practicing there.

#### SCIENTIFIC COUNSELORS MEET

Dr. Martin D. Young, head of the Epidemiology Section of the Laboratory of Parasite Chemotherapy was host to the Board of Scientific Counselors of the National Institute of Allergy and Infectious Diseases when they visited his Columbia laboratories for a two-day meeting beginning Wednesday, November 9. The six-man board of non-governmental scientists advises the Institute Scientific Director on the research program of NIAID.

The Epidemiology Section, a field station of the

Laboratory of Parasite Chemotherapy of the National Institutes of Health, Bethesda, Md., is located at the South Carolina State Hospital. Doctor Young joined the staff in 1937 and has directed the research of the laboratory since 1941.

#### INABINETS NOW LIVING IN CHESTERFIELD

Dr. and Mrs. Julian Inabinet are now making their home in Chesterfield. Dr. Inabinet is surgeon at the Chesterfield Memorial hospital.

#### DR. JAMES E. BOONE RETIRES

The Veterans Administration Regional Office in Columbia has announced the retirement of Dr. James E. Boone.

Dr. Boone, whose specialties are psychiatry and neurology, and urology, has spent the major portion of his life in Columbia, where, prior to his VA service, he was chief of one of the services at the S. C. State Hospital for 18 years. He has also engaged in private practice in Columbia.

Dr. William W. Pryor and Dr. Arthur Meakin will relocate from 206 E. North St. to 129 Mallard Street, Greenville.

DeWitt Shelton, M. D. announces the opening of his office for the practice of Psychiatry at 124 Bull Street, Charleston, S. C.

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## Deaths

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#### DR. W. B. NEWELL, SR.

Dr. Waldo B. Newell, Sr., 73, well known practicing physician of Enid, Okla., and a former resident of Anderson, died suddenly at his office in Enid on October 17.

Dr. Newell was born in Anderson County Nov. 26, 1887.

He received his early education in the schools of Anderson, graduated from Washington and Lee University and took his medical training at the University of Tennessee. He practiced for a time in Anderson before moving to Enid where he had been located for many years.

Dr. Newell practiced medicine fifty years.

#### DR. ROY M. WHITLEY

Dr. Roy M. Whitley, 54, died at the Veterans Hospital in Augusta recently after declining health of several years.

He had lived and practiced in Johnston for the past four years.

#### DR. W. W. SHARPE

Dr. W. W. Sharpe, 54, formerly of Spartanburg, died November 16 in Alma, Ga., after a long illness.

Dr. Sharpe interned at Spartanburg General Hospital in 1934.

#### DR. J. G. McMASTER

Dr. J. Gregg McMaster, 81, retired physician, died November 20 in Kelley Memorial Hospital after a short illness.

Dr. McMaster was born in Winnsboro March 28, 1879. He attended Winnsboro schools, graduating from high school and Mt. Zion College, Winnsboro. He also attended Clemson College and was graduated from the Medical College of South Carolina in 1903.

Dr. McMaster practiced medicine in Saluda and Newberry, moving to Florence in 1905, where he practiced until 1932. In the summer of 1932 he moved to Kingstree, where he continued to practice until his retirement in 1956.

## DR. T. M. DuBOSE

Dr. Theodore Marion DuBose, Jr., a Columbia physician, died in Charlotte Memorial Hospital recently. He was stricken ill while visiting his son.

Dr. DuBose lived most of his life in Columbia. He

was born in Rock Hill. He was graduated from the University of South Carolina, Class of 1906, and the Medical College of South Carolina, Class of 1910.

Survivors include his son, Dr. Hugh H. DuBose of Columbia.

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# Announcements

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The regular scientific meeting of the Columbia Medical Society will be held Monday, February 13, 1961, at 7:00 P. M. at the Columbia Hotel. The guest speaker will be Dr. John Kapp Clark, University of Pennsylvania, Renal Section of the Department of Medicine. He will speak on the subject "The Nature and Treatment of Renal Insufficiency". The local speaker will be Dr. Ronald Dew, who is in the practice of Obstetrics and Gynecology in Columbia.

The meeting will begin with a social hour at 7:00 P. M., followed by dinner, with the Scientific Session beginning at 8:30 P. M. All interested physicians are invited to attend.

The twenty-fourth annual meeting of The New Orleans Graduate Medical Assembly will be held March 6 - 9, 1961, headquarters at The Roosevelt Hotel. A clinical tour of the Orient will follow the New Orleans meeting.

American College of Allergists Graduate Instructional Course and Seventeenth Annual Congress,

March 12 - 17, 1961, the Statler Hilton, Dallas, Texas. For information write, John D. Gillaspie, M. D., Treasurer, 2141 14th Street, Boulder, Colorado.

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## COURSE IN LARYNGOLOGY AND BRONCHOSOPHAGOLOGY

March 13 through 25, 1961

The Department of Otolaryngology, University of Illinois College of Medicine, will conduct a post-graduate course in Laryngology and Bronchoesophagology from March 13 through March 25, 1961, under the direction of Paul H. Holinger, M. D.

Registration will be limited to fifteen physicians who will receive instruction by means of animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures.

Interested registrants will please write directly to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

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## PUBLICATION EXPLOSION

John M. Russell, President of The John and Mary R. Markle Foundation wrote recently on "Publication Explosion" in his annual report.

Mr. Russell compared the "publication explosion" to the "population explosion." "A smothering blanket of scientific publications . . . is now pouring off the presses at the rate of millions of articles a year" (an estimated 2,000,000 in the biological literature alone). "It has become impossible to catalog and abstract them all, much less evaluate them. Keeping abreast of them is no joke, especially to the patient who should benefit by all the advances in medical knowledge. 'Sifting' of these periodicals is complicated by the sad truth that many people in a position to evaluate it consider much of the current literature worthless, or at least of questionable value."

Many publications, he believes, result from the "unrelenting pressure put on our scientists" by "a world intensely interested in the eradication of disease and the advancement of medical knowledge." It

is the intensity of this interest "that has encouraged work on marginal projects, that has supported men of doubtful ability and has given a boost to the status seekers in medical science" . . . "Wrong reasons responsible for much research and many papers" are "because someone had too much money to spend; or because a government official had to dispose of all the appropriated funds within the fiscal year; or because someone forced someone else to work in an area not of his own choosing; or because someone found it easier to drift along on fellowships than to strike off on his own; or because a practitioner thought it would 'look good' if he did some research; or because an assistant professor needed 'to publish' to get a promotion; or because of a thousand other reasons irrelevant to the advancement of medical knowledge. Shoddy reasons for doing research tend to produce shoddy research . . . Scientific papers should be the main means of communication between scientist and scientists, and between scientist and practitioner, and should not be used for advertising purposes."

## FOUNDERS' DAY 1960

One of the most popular features of the 1960 Founders' Day, for which more than 180 physicians from all over South Carolina registered, was the afternoon devoted to special clinics. The fields of dermatology, radiology, orthopedics, ophthalmology and cancer put on these special clinics from 2 to

5 P. M. Objectives were to show diagnostic and therapeutic problems by presentation of selected patients and their significant findings. Guest physicians were escorted on a circuit of the clinics in groups of a dozen or so to allow opportunity for individual examination of patients and informal discussion.



*Panel on Automobile Accidents.*

*L to R—Mr. Coming B. Gibbs, attorney at law, Dr. John A. Siegling, Dr. Frederick Kredel, (moderator), Dr. Gordon Wannamaker, Dr. O. Rhett Talbert, Dr. Kenneth Lynch, Jr.*



*The Dermatology Staff (here Dr. Kathleen Riley) presents patients with interesting dermatological problems — their histories, pathology, diagnosis and treatment.*



*Demonstrations of Cancer Clinic instruments and techniques for office diagnosis of cancer. Dr. John Hawk wields the proctoscope.*



*The Orthopedic Staff puts on a fracture Clinic with demonstration of newer methods of treatment. Drs. Siegling and Belser (in background) answer questions.*



# Book Reviews

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*OBSTETRICS* from the Original Text of Joseph B. DeLee, M. D., J. P. Greenhill, M. D., 12th Edition. W. B. Saunders Company, Philadelphia, 1960. Price \$17.00.

It would be impossible to present a critique of this book in the space allotted for this review.

The first edition was published in 1913. It was prepared and it was written largely by Dr. Joseph B. DeLee at a time when he was approaching his prime. It was scholarly, not only in reference to its scientific content, but also in reference to its literary style. It was encyclopedic in reference to the science and the art of obstetrics, and those other conditions which affect or are affected by obstetrics. It reflected the vast experience, the keen observation, and the great ability to catalogue and classify what the author had seen and learned from his experience. The book became a classic. Dr. DeLee prepared six subsequent editions, the last of which was published in 1938.

Dr. J. P. Greenhill has prepared the last five volumes of the work. The last edition is a very different book from those prepared by the original author. It lacks the scintillating style of writing, and it does not seem to inspire the same reverential respect for the author and for his obstetrical omnipotence as did the earlier editions. (Evidence of hero worship? Perhaps.)

It could hardly be so. Dr. Greenhill states in the preface to this twelfth edition: "Because of the vast and almost unbelievable recent advances in all branches of medicine . . . I felt inadequate to prepare a book of this size again without considerable assistance. . . . Not only have valuable chapters and sections been added, but every page of the text has been rewritten." There is little of DeLee left in the book. There is considerably more than Dr. Greenhill in it.

There are twenty-three contributing authors and eight review editors. These collaborators are all eminent men of medicine and skillful writers, so that the sum of their contributions makes up a sound text of obstetrical concept and practice, and the concept and the practice relative to those many conditions which affect or are affected by the pregnant state. So, like those earlier editions, prepared by the author's predecessor, this volume is encyclopedic in scope and authoritative in content. It is therefore a very valuable reference book for the clinician and for the student. It is, perhaps, too massive and too comprehensive to be used as a college text book.

J.D.G.

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*THE OLDER PATIENT*, by Twenty-one Authors, edited by Wingate M. Johnson, M. D. Paul B. Hoeber, Inc.: New York, 1960. Price: \$14.50.

Dr. Johnson's book reviews the anatomical changes

in older patients, the diagnosis and general principals of treatment of the elderly, and attempts to outline various diseases most common in the geriatric groups and their treatment.

The chapters written by Dr. Johnson himself seemed to this reviewer to be most helpful. The author discusses the examination of the older patient in some detail, stressing the facts that the elderly patient must be put at ease, and one must take a great deal of time in the analysis of multiple complaints. Most interesting in the treatment of the older patient is a section on "logotherapy". Although he agrees with the philosophy that elderly patients should be told of any fatal disease, he makes a point of the fact that the choice of words is extremely important. He quotes that "you can at least put a bathing suit on truth".

Crandall writes most interestingly of the treatment of pain in the elderly patient. He surprisingly suggests that when narcotics are administered small doses act more rapidly and causes less circulatory and respiratory depression when given intravenously than larger doses subcutaneously.

Much of the discussion is devoted to local anesthesia for pain relief avoiding systemic effects.

The chapters on specific diseases of the elderly are covered most adequately and concisely.

The final chapter of the book by Dr. Johnson is concerned with helping the elderly patient accept the changes that have to do with increasing age.

His philosophy is sane and optimistic.

Although this book contributes very little that is new, it is a well organized symposium of the diseases of the aged and furnishes a technical and psychological review of problems of the geriatric patient.

Arthur V. Williams, M. D.

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*COMPLICATIONS IN SURGERY AND THEIR MANAGEMENT*, by Curtis P. Artz, M. D. and James D. Hardy, M. D. W. B. Saunders Co., Philadelphia, 1960. \$23.00.

This new work of 1075 pages with many collaborators presents in specific and practical detail the prevention and treatment of complications of operations. All fields of major surgery are well covered including the specialties with which the general surgeon may be concerned.

The problems that may be encountered are spelled out in complete fashion with advice as to treatment. Each chapter contains well chosen references to current literature. The illustrations and index are well done.

This excellent book fills a great need and should be in the hands of practicing surgeons.

Frederick E. Kredel, M. D.

*PSYCHOTHERAPISTS IN ACTION* by Hans H. Strupp. Grune and Stratton, New York, 1960. Price \$8.75.

This book represents the results of a research study of the Department of Psychiatry of The University of North Carolina. It is a research study of psychotherapy and psychotherapists. The emphasis in this book is on an attempt to delineate some common factor or factors that determine the productive results in psychotherapy, as well as the factors that may deter or limit these same productive forces in psychotherapy.

The research project uses a sound film of an actual therapeutic session involving the patient with acute anxieties and phobias, and being interviewed by a young psychiatric resident doctor. Several psychotherapists with varying personality backgrounds and professions, (including psychiatrists and psychoanalysts), are asked to view the film and answer special questions on a documentary form. The material is carefully tabulated and examined for various psychiatric determinants, such as warmth of the therapist, degree of therapeutic patience, levels or depths of understanding, inferential meanings, and so forth.

This book marks an important stride in the progress of understanding psychotherapy as a unitary science and dispels the oft heard notion that psychotherapy is not a science, and is in a state of professional confusion. Although a somewhat technical book, it clearly indicates that the entire field of psychotherapy is coming increasingly closer to the point where the tools of psychotherapy can both be understood and applicable in much the same way as other medical tools are used.

Norton L. Williams, M. D.

*THE HUMAN BLOOD PROTEINS*. Methods of Analysis and their Clinical and Practical Significance. Ferdinand Wuhrman and Charley Wunderley. Translated from the German by Harvey T. Adelson, 491 pages. Grune and Stratton, New York, N. Y. 1960. Price: \$15.75.

The third edition of this book continues with the subjective type of presentation of the physico-chemical characteristics of the blood proteins as related to clinical observations. All material presented in the second edition has been revised and many chapters rewritten. The subject material is divided into seven sections: Chemistry, reactions, methods, clinical methods, clinical significance in various specific syndromes, clinical significance in dys- and para-proteinemia and formation of proteins. Procedures, references, data and interpretation appear in a flowing and readable manner that successfully avoids the handbook style.

Many diagrams are presented to illustrate various patterns of blood proteins in a wide variety of dis-

eases and physiological abnormalities. Reaction constellations are presented for hepatitis, cirrhosis, malignant tumors and many other group types of pathology.

This is an extremely valuable book that should be of great interest to both the man at the bedside and the man in the laboratory.

William M. McCord, M. D.

*ANATOMY*, Ernest Gardner, Donald J. Gray and Ronan O'Rahilly. W. B. Saunders Company, Philadelphia. 1960. 999 pp., 40 tables, 65 plates, and 594 figs. Price: \$15.00.

This book contains a wealth of information presented in a fashion which will make it an effective aid to the student of anatomy. The authors have done an excellent job of presenting the beginning student with a background for his study of regional anatomy. The introductory chapter not only includes the usual definitions of anatomical terminology, but also continues with a brief history of the subject and a list of references to texts, atlases, and periodicals.

This work offers a good deal more than most beginning texts and as much information as some advanced books, yet it still has some shortcomings. The authors have tried to make it brief and concise in its presentation, but sometimes they are too brief. The practicing physician will find the book has a great many things to offer as a handy reference, but he may also find that the advanced information he seeks is lacking.

This text should be useful to the beginning student and helpful but somewhat limited in its usefulness to the physician and advanced student in anatomy.

Sherwin Mizzell, Ph. D.

*HUMAN PITUITARY HORMONES*: Ciba Foundation Colloquia on Endocrinology, Vol. XIII. Edited by G. E. W. Wolstenholme & Cecilia M. O'Connor. Little Brown & Co., Boston, 1960. Price \$9.50.

This volume is in keeping with the excellent standards set by the CIBA Foundation. International authorities expose the present knowledge on chemistry, biological action, and assay of the hormones of the human pituitary. Each paper is followed by an informal discussion which emphasizes the vast areas still open for research. One of the most important recent developments is the finding that the chemical structure of human and monkey growth hormone differs slightly from that of other mammals, and that primate growth hormone is biologically active when administered to humans. This book should be of great interest to research workers and clinicians interested in endocrinology. The section on bio-assay of pituitary hormones in blood and urine should provide valuable information to workers in clinical and research laboratories.

John Buse, M. D.

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*MEDICAL RESEARCH AND THE DEATH PENALTY: A Dialogue*, by Jack Kevorkian, M. D. Vantage Press, New York, 1960. Price \$2.50.

This is not a discussion of the desirability of the death penalty, and indeed that subject is carefully avoided throughout the book. It is a consideration in dialogue form between the Protagonist and the Antagonist of a suggestion that medical research might be profoundly and rapidly advanced if living bodies of criminals condemned to death were made available to investigators. The Protagonist offers a rather convincing argument that all practical difficulties in an arrangement of this kind could be overcome and that the advantages of obtaining information from human vivisection would be enormously beneficial. He proposes that the donation of his body to science by the criminal would be entirely voluntary and discusses the desirability of ending the criminal's life in the manner proposed, not only from the standpoint of the researcher, but also from the meaning of the contribution that the criminal would derive from the experience.

Obviously all of the proposed vivisection would be done under adequate anesthesia, and it is suggested that it might be possible to maintain a body in a state of anesthesia over a period of days or even weeks for the purpose of performing experiments which would require long observation. The author believes that human vivisection is by no means a new thought, and that the practice was used in ancient Alexandria about 300-200 B. C. The writer has also made a survey among condemned criminals and finds that the proposal would probably meet with much favorable acceptance among them.

This little book offers a good deal of food for thought and it appears that the proposition will be expounded further by the author.

JIW

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*MEDICINE TODAY: A REPORT ON A DECADE OF PROGRESS*, by Marguerite Clark. Funk & Wagnalls Co., New York, 1960. Price \$4.95.

This book is written by the "Medicine Editor" of *Newsweek* and its style reflects the author's acknowledged dictum that "News must be written clearly, readably, and if possible, dramatically." While medical readers do not run too much to approval of the dramatic in medicine, they have learned to accept the way in which medical news is presented in the news magazines, and no objection can be made to this particular presentation.

The author makes no specific acknowledgement of medical assistance, and appears to make her own selection of quotable material. It is to be supposed, however, that there has been adequate advice on some of the subjects presented, and at least no particular flaw in accuracy can be detected. Perhaps this is belaboring a small point, but the author uses the

first eighteen pages of her book as a apologium for the science writer.

The subject matter is quite varied, including the question of the deleterious effects of stilbesterol, the current concepts in heart disease, cancer, mental health, tranquilizers, suicide and so on. The coverage seems to be adequate, and there appears to be no bias in reporting, or at least the reader is given the opportunity to judge himself from the pronouncements of various acknowledged authorities who are quoted. The information appears accurate and up-to-date.

While the author finds scientists too retiring and silent for her purposes, she has had no difficulty in compiling in the latter portion of the book a short directory of pharmaceutical houses which includes only the larger corporations. This abounds in trade names, dear to the heart of the manufacturers, but somewhat under scrutiny by medicine in general and Kefauver committees in particular.

This book would seem to be well suited for the intelligent layman, and might even offer some forgotten information to the physician.

JIW

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*THE ROLE OF THE PHYSICIAN IN ENVIRONMENTAL PEDIATRICS*, Carl C. Fisher, M. D. Landsberger Medical Books, Inc., N. Y., 1960. Price \$5.50.

After long experience in practice and in teaching, the author is convinced that the average physician dealing with children is not sufficiently active in the solution of various socio-pediatric problems. Since active interest in these problems necessitates familiarity with them, the author offers in this book organized information on the several fields in which the child is involved and with which the physician is concerned. He covers briefly the subjects of accident prevention, adoption, school health, the handicapped child, and the adolescent, outlining briefly but adequately the current situation and the efforts to regulate them. Finally he offers a brief chapter on pediatrics as a career, discussing and answering some of the questions which have been raised in recent years by some disillusioned pediatricians, and he comes to the conclusion that pediatrics still offers many interesting features particularly if some of the matters discussed in this book are included in its field.

This book seems timely and worthwhile for anyone who deals with children and is not familiar with the various fringe activities which are actually definite parts of a practice which includes pediatrics. This is a brief but comprehensive review of these "fringe areas" and should be of interest to anyone dealing with children. It should also be of particular interest for the student who is not aware of the intricacies of pediatrics.

JIW

**FUNDAMENTALS OF CHEST ROENTGENOLOGY**, by Benjamin Felson, M. D., Professor and Director of the Department of Radiology, University of Cincinnati College of Medicine. W. B. Saunders Co., Philadelphia, 1960. pp 301. Price \$10.00.

This beautifully illustrated volume presents clearly and concisely the important principles in chest roentgenology. The cause, appearance and significance of "signs" such as the air bronchogram effect and silhouette sign are well explained, illustrated and diagrammed. An excellent review of the segmental anatomy of the lung is presented including the common variations of normal and the appearance of the segments in the more common disease states. Specific diseases are not discussed as such but some of their more common findings are used to illustrate the text. The heart is not covered in this work but the pulmonary vasculature is included. The beginner can quickly learn from this book. Groups of basic points such as the different appearances of intra-thoracic fluid are well represented.

Little is taken for granted by this author who passes on information only after checking against his own well organized and extensive experience.

This text is a must for anyone preparing for the responsibilities of chest interpretation.

Frank H. Gruber, M. D.

**THE SEA WITHIN: THE STORY OF OUR BODY FLUIDS**, by William B. Snively, Jr. J. B. Lippincott Co., Philadelphia, 1960. Price \$3.95.

The author is a frequent and able contributor to the professional literature on the subject of the body fluids and electrolytes particularly. This book is a very successful presentation of the same subjects to the layman and should be well adapted for use as an elementary textbook for the nurse and for the physician. It is well written and well illustrated with numerous diagrams and should be most acceptable to all readers.

JIW

**DIVERTICULITIS**, by Sara M. Jordan, M. D., and Russell S. Boles, Jr., M. D. Grune and Stratton, 1960, New York and London. pp 90. Illustrated by X-ray pictures. Price \$4.75.

A monograph by Sara M. Jordan and Russell S. Boles, Jr. of the Lahey Clinic, Boston, Massachusetts. An excellent historical review giving resumes of important articles in strictly chronological order. The subject is then presented in the usual text book manner as to etiology, pathology, diagnosis, and treatment. Opinions are cited, giving supporting evidence based upon series of cases — and statistical studies. The comments of the authors are given in pertinent paragraphs placed after each subhead.

The monograph is a scholarly presentation of the subject of diverticulosis and diverticulitis. It is complete and also concise. It can be read with interest or used as a reference by internists, surgeons, and radiologists.

William H. Prioleau, M. D.

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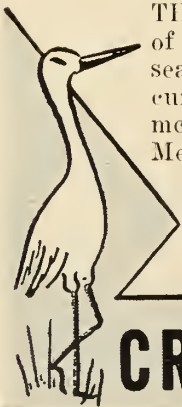
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### PHYSIOPHARMACOLOGICAL AND CLINICAL ASPECTS OF ADRENALINE AND NORADRENALINE

A. F. De SCHAEPPDRYVER, M. D.

*Fulbright Research Scholar, U. S. Educational Foundation in Belgium, and Riker Fellow from the J. F. Heymans Institute of Pharmacology, University of Ghent; Associate, National Fund for Scientific Research, Belgium.*

Both the sympathetic ganglionic tissue and the chromaffin tissue embryologically stem from cells which have their origin in the ectodermic neural crest. The largest part of the chromaffin tissue is represented by the suprarenal medulla. Less important cell groups follow the sympathetic ganglionic cells in their migrations, thus forming the accessory chromaffin tissue.

The embryological and anatomical similarity of sympathetic ganglionic cells and suprarenal medulla has its physiological counterpart. Indeed, in both structures the preganglionic transmission of the nervous impulses is mediated by acetylcholine, while the postganglionic and postmedullary effector substance corresponds to noradrenaline, respectively adrenaline + noradrenaline.

The proportions of both hormones in the suprarenal medulla vary according to the species. Thus in man and dog the adrenaline percentage represents about 80% of the total catecholamine content, in cat about 60% and in rabbit up to 99%. It is noteworthy that in the foetus the catecholamine content of the suprarenal medulla almost exclusively pertains to noradrenaline.<sup>1</sup>

#### *Physiopharmacological aspects*

In recent years much work has been done in order to elucidate the biosynthesis and biological inactivation of adrenaline and noradrenaline. It is now generally agreed that the starting point of the formation of both neurohormones lies in the amino-acid phenylalanine, while their metabolism mainly consists in enzymatic inactivation by catechol-O-methyl transferase<sup>2</sup> and monoamine oxidase,<sup>3</sup> a small percentage being excreted in the urine either in free or in conjugated form.<sup>4</sup>

Various problems with relation to the physiological and pharmacological mechanisms acting upon the secretion of adrenaline and noradrenaline, however, have remained either untouched or controverted, mainly due to the fact that specific and sensitive estimation procedures have been lacking until recent years. Using the highly specific fluorimetric method of differential estimation of the trihydroxyindole derivatives of adrenaline and noradrenaline<sup>5, 6</sup> we have thought it of interest to investigate some of these problems.

Thus the suprarenal medullary output of adrenaline and noradrenaline was studied in the suprarenal venous blood of dogs, in basal conditions and after stimulations of various origin.<sup>7</sup>

These experiments, the results of which are schematically presented in Fig. 1 and Fig. 2,

Lecture given on February 1, 1960 to the Medical Research Seminar, Medical College of South Carolina.

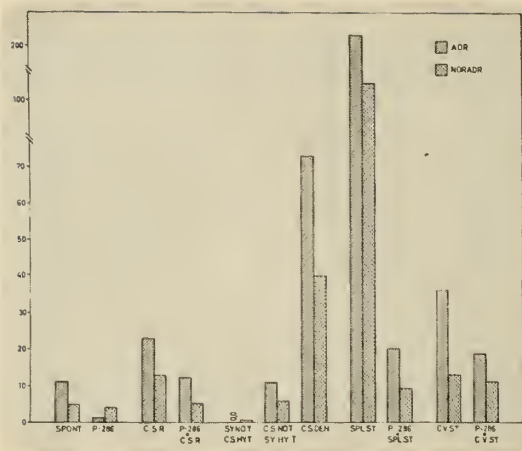


Figure 1

Supranal secretion of adrenaline and noradrenaline in dogs in .001 mcg/kg/min.

SPONT. : spontaneous secretion.

P-286 : after P-286 (2.5 mg/kg).

C.S.R. : during occlusion of both common carotid arteries (carotid sinus reflex).

P-286 : after P-286 (2.5 mg/kg) and during occlusion of both common carotid arteries (Carotid sinus reflex).

+ C.S.R. : during systemic normotension and carotid sinus hypertension.

SY.NO.T. : during carotid sinus normotension and systemic hypertension.

C.S.NO.T. : during carotid sinus normotension and systemic hypertension.

SY.HY.T. : systemic hypertension.

C.S.DEN. : after carotid sinus denervation.

SPL.ST. : during splanchnic stimulation.

P-286 : after P-286 (2.5 mg/kg) and during splanchnic stimulation.

+ SPL.ST. : during central vagal stimulation.

C.V.ST. : during central vagal stimulation.

P-286 : after P-286 (2.5 mg/kg) and during central vagal stimulation.

+ C.V.ST. : during central vagal stimulation.

C.V.ST. : during central vagal stimulation.

first showed that in 48 dogs under morphine-chloralosane anesthesia the spontaneous basal secretion from the left suprarenal gland ranged from .002 to .008 mcg/kg/min for noradrenaline and from .0045 to .0181 mcg/kg/min for adrenaline.

It was shown by Heymans<sup>8, 9</sup> as long as 30 years ago that the systemic arterial blood pressure level has an influence upon the suprarenal medullary secretion and that this effect is elicited essentially via the carotid sinuses.

In order to obtain quantitative data concerning the amounts and proportions of medullary hormones released under varying blood pressure conditions at the carotid sinus baroreceptors, experiments were performed in vagotomized dogs, in which the suprarenal venous blood was assayed in different conditions of arterial pressure at the level of the

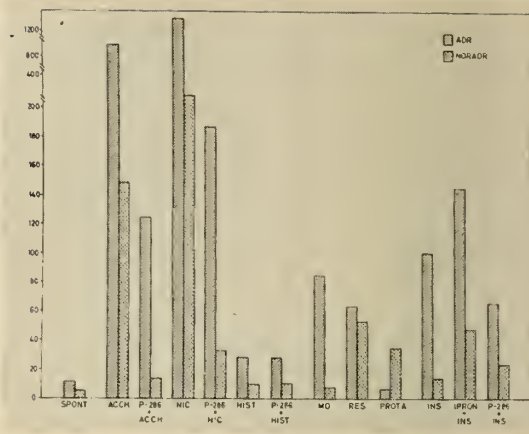


Figure 2

Supranal secretion of adrenaline and noradrenaline in dogs in .001 mcg/kg/min.

SPONT. : spontaneous secretion.

AC.CH. : after acetylcholine (2 mg/kg) in atropinized animals.

P-286 : after P-286 (2.5 mg/kg) and acetylcholine (2 mg/kg) in atropinized animals.

+ AC.CH. : after acetylcholine (2 mg/kg) in atropinized animals.

NIC. : after nicotine (0.1 mg/kg).

P-286 : after P-286 (2.5 mg/kg) and nicotine (0.1 mg/kg).

+ NIC. : after nicotine (0.1 mg/kg).

HIST. : after histamine (50 mcg/kg).

P-286 : after P-286 (2.5 mg/kg) and histamine (50 mcg/kg).

+ HIST. : after histamine (50 mcg/kg).

MO. : after morphine (2 mg/kg).

RES. : after reserpine (2 mg/kg).

PROT.A. : after protoveratrine A (4 mcg/kg).

INS. : after insulin (10 I.U./kg).

IPRON. : after iproniazid (50 mg/kg) and insulin (10 I.U./kg).

+ INS. : after insulin (10 I.U./kg).

P-286 : after P-286 (2.5 mg/kg) and insulin (10 I.U./kg).

carotid sinuses.

It was observed that occlusion of both common carotid arteries provoked a twofold increase in total medullary output, without significant changes in the adrenaline/noradrenaline ratio. Denervation of both carotid sinuses induced a sevenfold increase in total medullary output, with a slight predominance of the noradrenaline fraction. In other experiments hypertension was provoked locally at the level of both carotid sinuses, using the "isolated innervated sinus preparation". By this procedure the suprarenal secretion of noradrenaline could be reduced to nearly zero whereas the adrenaline secretion was completely blocked. On the other hand, systemic hypertension, provoked by intravenous in-

fusion of ephedrine hydrochloride, in presence of normotension at the level of the carotid sinuses, did not reduce suprarenal medullary secretion.

It was further shown that electric stimulation of the splanchnic nerves resulted in a marked increase in both adrenaline and noradrenaline secretion, up to a twentyfold of the basal secretion rate, while stimulation of the central end of the cut vagi provoked not more than a threefold increase in suprarenal medullary secretion, thus showing that the strong hypertensive reaction which occurs in this case is mainly of vasomotor origin and accessorially due to an increased output of suprarenal medullary hormones.

Various pharmacological substances were also studied with regard to their influence on suprarenal medullary secretion. It was observed that intravenous administration of acetylcholine in atropinized animals and of nicotine in intact animals was followed by a considerable increase, up to a hundredfold of the basal secretion in the latter case, in suprarenal adrenaline and noradrenaline output. The increase in suprarenal medullary output is much less pronounced after histamine and morphine. In all cases the adrenaline/noradrenaline ratio was increased.

The medullary reaction appeared to be quite different after administration of reserpine, in which case the increase in suprarenal catecholamine secretion essentially pertained to the noradrenaline fraction. This increase was most evident one hour after the administration of reserpine, when a sevenfold increase in total catecholamine output from the adrenal medulla was observed. These observations show that the suprarenal catecholamine depletion provoked by reserpine is not only due to an enzymatic destruction *in situ* under influence of monoamine oxidase, but also to a direct secretory effect of reserpine. The noradrenaline predominance was still more pronounced after protoveratrine A, which produced a preferential secretion of noradrenaline.

The pattern of response was quite different after insulin, the increase in medullary output being confined to the adrenaline fraction. Occasional increases in noradrenaline output

after insulin should be attributed to unsatisfactory circulatory conditions associated with the pronounced hypoglycemic state rather than to hypoglycemia itself. The predominance of an hypersecretion of adrenaline during insulin hypoglycemia was further demonstrated by the fact that after restoration of the blood glucose level by infusion of glucose the increase in adrenaline output dropped from a tenfold to less than a twofold increase in basal secretion, whereas the enhanced noradrenaline output was initially unaffected. It is also noteworthy to mention that after administration of iproniazid the medullary response to insulin is more pronounced.

It was also thought of interest to examine the possibility of a pharmacological blockade of the suprarenal secretory response to physiological and pharmacological stimulation of the suprarenal medulla. It is known that ganglionic blocking drugs may inhibit medullary secretion, but these substances also block other sympathetic ganglia and eventually parasympathetic ganglia, thus producing unwanted side effects. A substituted urea derivative, N, N-di-isopropyl-N'-isoamyl-N'-diethylamino-ethylurea hydrochloride (P-286<sup>+</sup>), which seemed to reduce the rise in arterial blood pressure provoked by splanchnic stimulation or by acetylcholine administration in atropinized dogs,<sup>10</sup> was studied with regard to its action on suprarenal medullary secretion. It was shown that this substance exerts a selective medullary blocking action without provoking, in the dosage used, a depression of either ortho- or parasympathetic ganglia. Thus in intact animals the medullary secretion of adrenaline could be almost completely inhibited, whereas the medullary noradrenaline secretion was reduced in a lesser degree. The same medullary blocking properties were also observed with regard to the medullary response to occlusion of both common carotid arteries, stimulation of the central end of the cut vagi, injection of acetylcholine in atropinized animals and of nicotine in intact animals. It is of interest to note that this substance was found unable to prevent the enhanced suprarenal medullary secretion after histamine,

<sup>10</sup> P-286 was kindly supplied by Pitman-Moore Comp., Indianapolis, Ind.



thus suggesting a peripheral mode of action of the latter substance with regard to its medullary stimulating properties.

Beside the data pertaining to each particular substance used, this series of experiments gives pharmacological proof for the possibility of a differential or even a preferential secretion of medullary adrenaline and noradrenaline, thus implying that noradrenaline is to be considered not only as the adrenergic neurohormone or as the medullary adrenaline precursor but also as an independent medullary hormone. Additional evidence for this viewpoint was given in recent years by various investigators, using histological and physiological techniques, involving direct hypothalamic, neuroreflex and chemoreflex stimulation of suprarenal medullary secretion.<sup>11-16</sup>

In a more general way it may also be concluded that the experimental design used in these experiments may give valuable informations in the screening of pharmacological substances with potential stimulating or inhibiting effects on the suprarenal medulla and in the study of the mode of action of these drugs.

#### *Clinical aspects*

Since functional exploration of the suprarenal medulla by direct estimation of the medullary hormones in suprarenal venous blood may only exceptionally be performed in man, estimation of the urinary catecholamines may be considered at present as the most reliable and practical test of suprarenal medullary function as well as of nervous sympathetic function in general.

Postural hypotension is a clinical example of hypofunction of the medullo-sympathetic system. In typical cases the inability to maintain a normal arterial blood pressure in the erect position is associated with the presence of low urinary excretion figures of adrenaline and especially of noradrenaline. Moreover, the catecholamine secretory reaction to injection of histamine and insulin is absent, showing a functional insufficiency of the medullo-sympathetic system.<sup>17</sup> Postural hypotension has been reported as a syndrome on its own or as a concomittant symptome of tabes dorsalis and syringomyelia and as a sequence of sympathectomy.<sup>18</sup>

Hyperfunction of the chromaffin cell tissue

occurs in cases of chromaffin cell tumor. These tumors may be classified into suprarenal chromaffinomas, or pheochromocytomas, and extrasuprarenal chromaffinomas, which usually originate from the ganglia of the sympathetic chain, but may as well be located in other parts of the body. Chromaffinomas may have a single or multiple localization, occur in children as well as in adults, be found repeatedly in the same family and be malignant in some cases.

The fact that the diagnosis of chromaffinoma has for a long time been the result of an autopsy finding, and that its presence is still often overlooked is not only due to its widely varying symptomatology and to the fact that a considerable percentage occur in cases of sustained hypertension, but also to the lack of reliable diagnostic tools.

Palpation of the tumor is rarely possible. Pheochromocytomas may be visualized by plain roentgenography in about 20% of cases, by intravenous or retrograde pyelography in about 35% of cases and by retroperitoneal gas insufflation in about 50% of cases.

On the other hand, it is known that the various pharmacological tests — provocative as well as blocking — may give falsely positive or falsely negative results. This disadvantage, together with the eventual occurrence of unwanted side-effects, considerably restrict their clinical value.

Ten years ago, Engel and von Euler<sup>19</sup> observed that large amounts of adrenaline and noradrenaline were excreted in the urine in two surgically controlled cases of pheochromocytoma. This finding was since repeatedly confirmed.<sup>20-22</sup> Moreover, a good correlation could generally be observed between the amounts of noradrenaline and adrenaline excreted in the urine and the amounts present in the blood and in the tumor, showing that the excretion rate of the catecholamines in the urine really reflects the activity of the tumor.

While the finding of considerable amounts of urinary catecholamines may clearly prove the presence of a chromaffin cell tumor, differential estimation of these hormones may give valuable information with regard to the localization of the tumor. Thus suprarenal chromaffinomas usually release adrenalinic as well as

noradrenaline, whereas a chromaffinoma secreting only noradrenaline is usually located outside the suprarenals.

Using the fluorimetric trihydroxyindole method for differential estimation of adrenaline and noradrenaline, more than 700 estimations of urinary catecholamines were carried out in 332 patients. In 8 of these patients the presence of a chromaffin cell tumor could be diagnosed with certainty.

The urinary excretion figures of adrenaline and noradrenaline observed in these cases, and the weight and catecholamine content of the tumor in those cases in which the tumor could be assayed after removal are presented in Table I.

served in Case 6 in urine collected during and after an hypertensive attack, the excretion figures amounting to 1588 mcg/24 hrs. for noradrenaline and 432 mcg/24 hrs. for adrenaline. In this case<sup>23</sup> a voluminous pheochromocytoma, weighing 413 g and containing 1.22 mg/g of adrenaline and 1.85 mg/g of noradrenaline, had been removed two and a half years before our first estimation of urinary catecholamines. Moreover, while the hypertension presented by this patient prior to the removal of the pheochromocytoma belonged to the permanent type, the recidive dealt with here is characterized by the occurrence of paroxysmal attacks of hypertension. Finally, the patient recently presented a tumor meta-

Case No.	Age (Years)	Sex	Type of hypertension	Localization	Average urinary output in mcg/24 hrs.		Catecholamine content of tumor in mg/g		Tumor weight in g
					Nor-adrenaline	Adrenaline	Nor-adrenaline	Adrenaline	
1	7	M	Paroxysmal	At site of right adrenal	188	33	—	—	—
2	17	F	Permanent + Paroxysmal	Between pubis and urinary bladder	724	12	0.67	0	40.6
3	26	F	Permanent	Thoracic sympathetic chain	264	7	0.50	0.12	3
4	21	F	Paroxysmal	At site of right adrenal	808	42	0.75	0.15	32
5	38	M	Paroxysmal	At site of right adrenal	644	19	0.59	0.02	20.6
6	46	M	Permanent + Paroxysmal	—	744	273	—	—	—
7	42	M	Paroxysmal	At junction of left ureter and urinary bladder	884	9	2.44	0	97
8	21	M	Permanent	At site of left adrenal	21	216	—	—	220
9	58	M	Permanent	—	124	10	—	—	—
10	45	F	Permanent	—	120	8	—	—	—

TABLE I

Adrenaline and noradrenaline content of urine and of extirpated chromaffinomas in 8 patients with chromaffin cell tumor.

In Cases 9 and 10 of this Table the presence of a chromaffin cell tumor is very probable but certainty has still to be verified by further estimations.

It is noteworthy to mention that repeated mecholyl tests had given falsely negative results in Case 4.

The highest excretion figures have been ob-

served in a rib, which on biopsy showed the presence of chromaffin tissue and an adrenaline content of 3.5 mcg/g; no noradrenaline could be detected.

The average excretion figures in Case 8 were pre-operatively of 21 mcg/24 hrs. for noradrenaline and 216 mcg/24 hrs. for adrenaline and post-operatively of 23 mcg/24 hrs.

Case No.	Collection of urinary catecholamines	Calculated output of catecholamines from chromaffinoma in mg/24 hrs.		Catecholamine content of tumor in mg.		Amount of catecholamines secreted in 24 hrs., in per cent of tumor content	
		Nor-adrenaline	Adrenaline	Nor-adrenaline	Adrenaline	Nor-adrenaline	Adrenaline
2	At lowest excretion rate	3.2	—	27.2	0	11.8	—
	At highest excretion rate	34.3	—			126.1	—
3	At lowest excretion rate	4.4	0.40	1.5	0.36	293.3	111.1
	At highest excretion rate	7.8	0.64			520	177.7
4	During + after paroxysmal attack	19.2	0.85	24	4.8	80	17.7
5	During + after paroxysmal attack	15.1	0.27	12.1	0.4	124.8	67.3
7	During + after paroxysmal attack	40.3	—	236.7	0	17	—

TABLE II

Relationship between calculated output of adrenaline and noradrenaline from chromaffinoma, based on urinary excretion before operation, and catecholamine content of tumor, estimated after surgical removal.

for noradrenaline and 6 mcg/24 hrs. for adrenaline. We do not know of any other case in the literature in which enhanced excretion of adrenaline only was reported. This finding could unfortunately not be confirmed by assay of the tumor content since the tumor was not available for fluorimetric estimation.

While the finding of excessive amounts of catecholamines or, as shown recently by various investigators,<sup>24-27</sup> of some of their metabolites, in the urine, may give decisive proof of the presence of a chromaffin cell tumor, the collection of blood samples, drawn by catheterization from different levels of the vena cava system, and the subsequent assay of these blood samples may give most helpful informations with regard to the localization of the

tumor. This was illustrated in Cases 2, 3 and 7 of Table I.

By comparing the urinary excretion of catecholamines in chromaffinoma patients with the catecholamine content of the tumor one may obtain an estimate of the rate of resynthesis in chromaffin cell tumors,<sup>28</sup> as shown in Table II. The calculations reported in this Table are based on the observation that about 4% of administered catecholamines are excreted unchanged in the urine.<sup>29, 30</sup> The data reported suggest a rather high rate of resynthesis of catecholamines in chromaffin cell tumors, thus confirming experimental observations with radioactive tracers reported by Sjoerdsma and co-workers.<sup>31</sup>

#### REFERENCES

- Hökfelt, B. *Acta physiol. scandinav.*, 1951, 25: Suppl. 92.
- Axelrod, J. *Physiol. Rev.*, 1959, 39 : 751.
- Blaschko, H. *Pharmacol. Rev.*, 1952, 4 : 415.
- Euler, U. S. von, Luft, R. & Sundin, T. *Acta physiol. scandinav.*, 1954, 30 : 249.
- Euler, U. S. von & Floding, I. *Acta physiol. scandinav.*, 1955, 33, Suppl. 118 : 45.
- De Schaepdryver, A. F. *Arch. internat. pharmacodyn.*, 1958, 115 : 233.
- De Schaepdryver, A. F. *Arch. internat. pharmacodyn.*, 1959, 121 : 222.
- Heymans, C. *Compt. rend. Soc. biol.*, 1929, 100 : 199.
- Heymans, C. *Compt. rend. Soc. biol.*, 1929, 100 : 765.
- Weaver, L. C., Abreu, B. E., Alexander, W. M. & Richards, A. B. *Arch. internat. pharmacodyn.*, 1959, 121 : 415.
- Blaschko, H. & Welch, A. D. *Arch. exper. Path. u. Pharmacol.*, 1953, 219 : 17.
- Eränkö, O. *Acta endocrinol.*, 1955, 18 : 174.
- Hillarp, N.—A. & Nilson, B. *Acta physiol. scandinav.*, 1954, 31, Suppl. 113 : 79.
- Euler, U. S. von & Folkow, B. *Arch. exper. Path. u. Pharmacol.*, 1953, 219 : 242.
- Dunér, H. *Acta physiol. scandinav.*, 1954, 32 : 63.
- Euler, U. S. von & Folkow, B. *Acta physiol. scandinav.*, 1958, 42 : 313.
- Luft, R. & Euler, U. S. von. *Metabolism*, 1952, 1 : 179.
- Ellis, L. B. & Haynes, F. W. *Arch. Int. Med.*, 1936, 58 : 773.
- Engel, A. & Euler, U. S. von. *Lancet*, 1950, 259 : 387.



20. Goldenberg, M. & Rapport, M. M. Meet. Soc. Clin. Invest., May 1951.
21. Lund, A. Scandinav. J. Clin. & Lab. Invest., 1952, 4 : 263.
22. Pekkarinen, A. & Pitkänen, M.—E. Scandinav. J. Clin. & Lab. Invest., 1955, 7 : 8.
23. Van Staey, J. & Boels, W. Belg. tijdschr. geneesk., 1957, 13 : 425.
24. Armstrong, M. D., McMillan, A. & Shaw, K. N. F. Biochim. et biophys. acta, 1957, 25 : 42.
25. LaBrosse, E. H., Axelrod, J. & Sjoerdsma, A. Fed. Proc., 1958, 17 : 386.
26. Sjoerdsma, A., Leeper, L. C., Terry, L. L. & Udenfriend, S. J. Clin. Invest., 1959, 38 : 31.
27. Kraupp, O., Stormann, H., Bernheimer, H. & Obenaus, H.: Klin. Wchnschr., 1959, 37 : 76.
28. Euler, U. S. von. In: Hormone Production in Endocrine Tumours (A Ciba Found. Colloquium), London, 1958, 268.
29. Euler, U. S. von & Luft, R. Brit. J. Pharmacol., 1951, 6 : 286.
30. Goldenberg, M. Am. J. Med., 1951, 10 : 627.
31. Sjoerdsma, A., Leeper, L. C. & Udenfriend, S. Fed. Proc., 1957, 16 : 336.

## GRISEOFULVIN: THERAPY FOR SUPERFICIAL FUNGUS INFECTIONS

KATHLEEN A. RILEY, M. D.

Associate Professor of Dermatology, The Medical College of South Carolina, Charleston.

Griseofulvin is the first antifungal antibiotic which has proven effective by oral administration in the treatment of superficial mycoses or so called "ringworm infections." These infections are caused by a group of fungi called the dermatophytes which include the *Microsporum*, *Trichophyton* and *Epidermophyton*. They have always been resistant to treatment and have produced a therapeutic problem as locally applied medications were unable to penetrate deeply enough to reach the fungi in the keratin layer of the skin, hair and nails. The clinical pictures of these infections are described according to the areas of the body involved, such as tinea pedis (athlete's foot), tinea capitis, tinea corporis and tinea unguium.

Griseofulvin was first isolated in England in 1939 by Oxford and his associates<sup>1</sup> from *Penicillium griseofulvin* Dierck. In that same year Fleming discovered the antibiotic effect of penicillin, and like penicillin, griseofulvin was known for many years before its value to man was appreciated. It was nineteen years later in 1958 that Gentles<sup>2</sup> and his associates reported its effectiveness against induced ringworm infections in guinea pigs. Within the year studies were done showing that the drug was effective in humans with ringworm infection. These first studies were done by three different groups, Riehl<sup>3</sup> in Austria, Williams and associates<sup>4</sup> in England, and Blank and

Rolf<sup>5</sup> in the United States. During the first year of its use, the evaluation of the drug has been rapid and its use extensive. It has also been tried in patients with fungus infections other than ringworm and has been found ineffective in moniliasis (candidiasis), North American blastomycosis, histoplasmosis, actinomycosis, cryptococcosis and tinea versicolor.

The chemical structure of griseofulvin has been established by several investigators, to have the following formula:

### *Griseofulvin*

It is the fermentation product of three species of *Penicillium*: *P. patuli*, *P. griseofulvum* and *P. janczewski*. It is a colorless, odorless, neutral, thermostable antibiotic, only very slightly soluble in water. Its absorption, excretion, utilization by tissue and mode of action are obscure. However, in 1946 Brian<sup>6</sup> isolated a substance which he called the "curling factor" as it caused the development of abnormal, fungal hyphae, showing shriveled and stunted growth. This substance was shown by Grove and McGowan<sup>7</sup> in 1947 to be identical with griseofulvin. Thus griseofulvin exerts a fungistatic and not a fungicidal effect.

Gentles<sup>8</sup> first demonstrated the presence of therapeutically used griseofulvin in hair of infected guinea pigs, and theorized that eradication of mycotic infection was due to the presence of griseofulvin in keratin. This was subsequently proven to be true as griseofulvin

is effective by disturbing the metabolism of fungi by direct contact, preventing the invasion of the fungus into the keratin. As the epidermis desquamates and the hair and nails grow out, the infection is actually shed. This explains why the treatment has to be prolonged. The duration of treatment required for the different areas infected varies depending on the time required for the normal replacement of the infected tissue.

When the drug is given orally, it is absorbed through the intestinal tract and incorporated in the keratin. It is not yet clear whether the drug is absorbed and used in its original form. It is not an antibacterial antibiotic and its prolonged administration does not disturb the normal intestinal tract.

### *Clinical Studies*

This clinical study was done on ambulatory patients in the author's private practice. A series of 41 patients with 63 sites of major involvement with superficial fungus infections, proven by culture, were treated with griseofulvin.\* They ranged in age from 3 years to 76 years. There were 27 white males and 14 white females.

The optimum daily dose for griseofulvin has not yet been established but the effective therapeutic dose for the average adult seems to be 1.0 gram per day. This dosage was used in all patients except children whose weight was under 60 pounds. They received 0.5 grams a day. The drug was given in divided doses, four times a day after eating. No local treatment was used.

All patients were cultured before treatment and every week for one month, then every 2 weeks until two negative cultures were obtained. In nail infections cultures were done every month. Laboratory studies including complete blood counts, urinalysis, cephalin flocculation tests and blood urea nitrogen levels were done at the beginning of treatment and at the end of treatment on 28 of the patients.

In general, species of the dermatophytes respond in like manner to similar doses of griseofulvin. But speed of response depends on the rate of keratinization and the time necessary

for desquamation. So it is more convenient to discuss response to therapy by the major site of involvement than by organism.

*Tinea Corporis* may present a wide variety of clinical pictures varying from the involvement of a very small area to extensive lesions. The commonest clinical picture is the annular, erythematous, papulo-squamous lesion. The central area may be scaly and the advancing active edge studded with vesicles and pustules. When these lesions are confined to the groin area, they are called tinea cruris. When they are confined to the axilla, they are called tinea axillaris.

*Tinea Corporis*, including tinea cruris and tinea axillaris was treated in 13 patients with 18 different areas involved. Of these 14 were trichophyton rubrum infections of 1 to 16 years duration. One-half of these patients had been infected for 15 years or longer. Two patients had trichophyton mentagrophytes infections of 3 months duration and 2 had a microsporum canis infection of one months duration.

Pruritus was relieved in 75% of the patients within 3 days. It was relieved in all patients within 7 days. The most dramatic clinical clearing was in extensive tinea corporis of long duration.

Negative cultures were obtained in 7 cases after 2 weeks, in 4 cases after 3 weeks, in 6 cases after 4 weeks and in 1 case after 5 weeks. All patients were clinically well in 1 to 2 weeks despite the fact that some were culture positive, which emphasizes the need for cultures to determine cure. All patients were clinically well and culture negative within 5 weeks.

*Tinea Capitis* on a clinical, pathological basis is divided into two groups, the microsporum and the trichophyton infections. In this series there are two types of microsporum infections, microsporum audouini, the epidemic human form and microsporum canis, the non-epidemic animal form. These types are almost exclusively seen in children. The diagnosis is aided by Wood's ultraviolet light which causes a brilliant yellowish-green fluorescence of the infected hairs. All patients were followed with the Wood's light examination as well as with KOH and culture studies.

Eight children were treated with infection of 2 weeks to 52 weeks duration. Two were

\*"Supplied as Griseofulvin-Ayerst, Ayerst Laboratories, New York, 16, N. Y."

### *Tinea Corporis*

Organism	Duration
T. rubrum	14 1 - 16 years
T. mentagrophytes	2 3 months
M. canis	2 1 month
Total	18

Negative Cultures	Cases
2 weeks	7
3 weeks	4
4 weeks	6
5 weeks	1
Total	18

cases of microsporum audouini and 6 were cases of microsporum canis infection. Negative cultures were obtained in 2 cases in 3 weeks, 2 cases in 4 weeks, 2 cases in 5 weeks, 1 case in 8 weeks and 1 case in 12 weeks.

All patients fluoresced under the Wood's light until culture negative except 1 case which was Wood's light negative in 4 weeks before cure. This finding agrees with other reports. Negative Wood's light fluorescence cannot be used as a criteria for cure;<sup>9, 10</sup> negative cultures are the most accurate criteria.

The length of hair seems to affect the length of time needed for treatment. The patients with shorter hair were negative within 5 weeks. The patients with long hair took 8 to 12 weeks for cure. It has also been reported elsewhere, that the response of tinea capitis to treatment before and after the advent of griseofulvin is delayed by long hair.<sup>10, 11</sup>

*Tinea Barbae* is a rare chronic fungus infection of the bearded area and may be caused by a trichophyton or microsporum organism. The lesions may either be superficial or deep. The two cases reported were both deep granulomatous lesions of the upper lip caused by trichophyton rubrum. The duration of the infection was 3 and 6 weeks. One case was culture negative within 3 weeks and the other case in 4 weeks. Clinical response was rapid with apparent healing of the lesions within ten

### *Tinea Capitis*

Organism	Duration
M. audouini	2 1 mo. to 1 year
M. canis	6 2 weeks to 4 mos.
Total	8

### Negative Cultures

### Cases

Short Hair	3 wks.	1 M. can. & audou.	2
	4 wks.	1 M. can.	2
	5 wks.	1 M. can. & audou.	2
Long Hair	8 wks.	M. canis	1
	12 wks.	M. canis	1
Total			8

days. There was no scarring. There has been no recurrence on a six months follow-up.

### *Tinea Barbae*

#### (Trichophyton Granuloma)

Organism	Duration
T. rubrum	2 3 to 6 weeks
Negative Culture	Cases
3 weeks	1
4 weeks	1
Total	2

*Tinea Pedis* may vary from simple maceration and erythema in the toe webs to an acute, oozing, erythematous, incapacitating dermatitis. This group of 21 patients had moderately severe or severe infections involving areas of the foot as well as the toe webs. Trichophyton rubrum was the causative organism in 15 cases, trichophyton mentagrophytes in 5 cases and epidermophyton floccosum in one case. The infections had been present from 1 to 3 years.

Seven were culture negative in the 4 to 6 weeks, 8 in 6 to 8 weeks, 2 in the 10th week, 1 in the 18th week and 1 in the 24th week. One has been on treatment for 44 weeks and is still positive in the toe webs. Therapy had to be discontinued in one because of urticaria.

The clinical response was erratic and not easy to evaluate as flare-ups tended to occur while under treatment. However, most patients had clinical improvement within 2 weeks.

*Tinea Unguium*, infection of the nails, is most frequently caused by various trichophytons or candida albicans. Fourteen cases have been treated with trichophyton rubrum of 1 to 30 years duration. Ten of these had been infected for 10 years or longer. All had toe nail involvement and 2 also had finger nail involvement. Nail infections present a difficult prob-



### *Tinea Pedis*

Organism	Duration
<i>T. rubrum</i> -----15-----	1 - 30 years
<i>T. mentagrophytes</i> ---5-----	1 - 30 years
<i>Ep. floccosum</i> -----1-----	2 years
Total 21	

Culture Negative	Cases
4 - 6 weeks -----	7
6 - 8 weeks -----	8
10 weeks -----	2
18 weeks -----	1
24 weeks -----	1

#### *Culture Positive*

(wks. of treatment)	
44 weeks -----	1
Discontinued therapy -----	1
Total	21

lem as it is necessary to wait for the nail to grow sufficiently for the infection to be carried beyond the free edge. Fingernails require 4 to 6 months to grow out and toenails require 6 to 12 months or longer.

In this series, the 2 patients with fingernail infections were clear in 5 and 7 months. In 12 patients with toe nail infections, 1 was clear in 5 months and 2 in 8 months. In one of these cases the entire nail was not involved. All others are still culture positive and have been under treatment for 8 to 12 months. Eight of these have been on therapy for 9 or more months. They are all showing definite improvement and growth of new uninfected nails at the base. (Fig. 1, 2)

### *Tinea Unguium*

Organism	Duration
<i>T. rubrum</i> -----14-----	1 to 30 years

Fingers		Toes	
Negative		Negative	
Cultures	Cases	Cultures	Cases
5 months -----	1	5 months -----	1
7 months -----	1	8 months -----	2
		Positive	
		Cultures	Cases
		8 months -----	2
		10 to 12 months -----	7

*Laboratory Studies* were done on 28 of the 38 patients. Urinalysis, cephalin flocculation test and blood urea nitrogen levels showed no abnormal findings. Complete blood counts showed no abnormal findings in 24 patients. The other 4 developed leukopenia from 3,600 to 4,000 WBC cu/mm. with a normal differential. These patients had been on therapy for three months or longer.

*Adverse Reactions:* No side effects were noticed by 27 patients. Three developed headaches during the first week of therapy. Four developed symptoms of mild gastric discomfort and 2 developed nausea. All of these symptoms subsided without discontinuing the drug.

Two patients developed urticaria. One case cleared while still on the drug. The other patient discontinued the drug and cleared in 48 hours. However, dosage was repeated three



Figure 1

*Onychomycosis — T. rubrum type — treated with griseofulvin for 5 months showing sharp line of demarcation of new uninfected nail from old discolored infected nail.*



Figure 2

*Onychomycosis — T. rubrum type — treated with griseofulvin for 9 months showing normal regrowth of nail with slight discoloration of distal edge, still culture positive.*

weeks later and urticaria again developed. Therapy was discontinued.

Two patients developed an acute monilial infection proven by culture at the site of the original infection. These responded to local treatment after the drug was discontinued.

Three patients were known to be sensitive to penicillin. Two showed no adverse reaction. One case developed urticaria.

### Comments and Summary

Griseofulvin, an oral fungal antibiotic, was given to 38 patients with culture proven superficial fungus infections. One gram per day seems to be adequate in most cases for cure.

Griseofulvin seems to be of low-toxicity for man. However, because of possible leukopenia, periodic blood counts should be done.

Negative cultures are the most reliable criteria for cure.

*Tinea Corporis* responds rapidly to oral griseofulvin. Especially when lesions are extensive it is a practical and excellent form of therapy. A few small lesions are probably treated more

simply and as adequately with only local treatment.

*Tinea Capitis*, previously very resistant to treatment, is a major indication for the use of griseofulvin as this drug is the simplest and most rapid form of therapy which has ever been available.

*Tinea Barbae*, of the deep granulomatous type, is a rare lesion which will heal spontaneously in 6 to 8 weeks but it responds more rapidly to griseofulvin therapy.

*Tinea Pedis* responds erratically to griseofulvin therapy. Response here is not so dramatic or rapid as in *tinea corporis* and *tinea capitis*. Longer periods of therapy are necessary in some instances. Further study will be necessary for the evaluation of this drug in the treatment of *tinea pedis*.

*Tinea Unguium*, caused by *trichophyton rubrum*, has rarely been cured before the availability of griseofulvin. With this drug a normal regrowth of the nail may be obtained. The long term therapy is an impractical aspect. However, results are excellent if continued until negative cultures are obtained.

### REFERENCES

1. Oxford, A. E., Raistrick, H., and Simonart, P.: Studies in the biochemistry of micro-organisms: LX. Griseofulvin,  $C_{17}H_{15}O_5Cl$ , a metabolic product of *Penicillium griseofulvum* Dierckx. *Biochem. J.* 33:240, 1939.
2. Gentles, J. C.: Experimental ringworm in guinea pigs: oral treatment with griseofulvin. *Nature* 182:476, 1958.
3. Richl, G.: Griseofulvin: an orally active antibiotic. Presented at a meeting of the Austrian Dermatological Society, Vienna, Nov. 27, 1958.
4. Williams, D. I., Marten, R. H., and Sarkany, I.: Oral treatment of ringworm with griseofulvin. *Lancet* 2:1212, 1958.
5. Blank, H., and Roth, F. J., Jr.: The treatment of dermatomycoses with orally administered griseofulvin. *A. M. A. Arch. Dermat.* 79:259, 1959.
6. Brian, P. W., Curtis, P. J., and Hemming, H. G.: Biological assay, production and isolation of "curling factor." *Trans Brit. Mycol. Soc.* 29:173, 1946.
7. Grove, J. F., and McGowan, J. C.: Identity of griseofulvin and "curling factor." *Nature* 160:574, 1947.
8. Gentles, J. C., Barnes, M. J., and Fantes, K. H.: Presence of griseofulvin in hair of guinea pigs after oral administration. *Nature* 183:256, 1959.
9. Robinson, H. M., Jr., Robinson, R. C. V., Bereston, E. S., Manchey, L. L., and Bell, F. K.: Griseofulvin, clinical and experimental studies. *A. M. A. Arch. Dermat.* 81:66, 1960.
10. Kirk, J., and Ajello, L.: Use of griseofulvin in the therapy of *tinea capitis* in children. *A. M. A. Arch. Dermat.* 80:259, 1959.
11. McCuiston, C. H., Jr., Lawlis, M. G., and Gonzalez, B. B.: Toxicological studies and effectiveness of griseofulvin in dermatomycosis. *J. A. M. A.* 171:2174, 1959.

# ON THE INTERPRETATION OF RENAL FUNCTION TESTS IN RENAL DISEASE

CHEVES McC. SMYTHE, M. D.

*Associate Professor and John and Mary R. Markle Scholar in Medicine,*

*Department of Medicine, Medical College of South Carolina.*

**T**he study of kidney disease begins with examination of the urine. This statement has been attributed to Bright. Careful clinical study can allow one to predict often with great accuracy what the histological picture of a diseased kidney will show. In this clinical paper, conclusions to be drawn from tests in common use in hospital laboratories are considered. Specifically, the urine specific gravity, urinary albumin levels, study of the urinary sediment, the PSP test, and blood chemistries will be discussed. These tests allow accurate estimation of the functional status of the kidney.

Glomerular filtration rate is the important parameter of human renal function. The first step in the formation of urine is glomerular filtration. However, the kidney does no work in this process and the energy necessary to drive the filtrate across the glomerular membrane is provided by the heart. The glomerulus may leak protein and cells when diseased, but the only primary physiologic defect of glomerular disease is reduction of the volume of filtrate. Therefore, glomerular renal disease follows more predictable and stereotyped patterns than does tubular disease.

The renal tubule, on the other hand, alters the composition of the filtrate by either the addition or subtraction, or both, of many substances until the urine in its final composition emerges from the collecting ducts. Tubular renal disease is therefore very pleomorphic in its clinical manifestations, and its course may be varied. On this very simplified picture of renal function rests the approach to the meaning of the laboratory tests to be outlined.

## *Specific Gravity*

A normal or a high urinary specific gravity

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The author emphasizes the value of routine kidney function tests, and discusses some of the particular conditions in which certain tests are most important. He refers particularly to postural proteinuria, effects of exercise, and the value of the phenol-sulfonphthalein test.

Relatively simple renal function tests will allow remarkably accurate inferences about the exact status of renal function. A fixed specific gravity indicates decreased glomerular filtration rate in glomerular renal disease, but in such diseases as a polycystic kidney and pyelonephritis, the prognostic import of a fixed specific gravity is not as grave. Heavy proteinuria is characteristic of glomerular renal disease. The degree of proteinuria, however, does not reflect the functional status of the kidney. A 15-minute PSP excretion of over 25% is not found in patients who have grossly diminished renal function. Careful study of the casts to be found in the sediment will allow one to differentiate glomerulonephritis and pyelonephritis in many instances. The use of the Gram stain for urinary bacteria will allow identification of pyelonephritis the commonest of all renal diseases, in many instances.

usually indicates that a patient has good renal function, whereas a fixed specific gravity means poor renal function. In glomerular renal diseases, fixed specific gravity (isosthenuria) is equated with severe reduction of filtration rate. There are some exceptions to this statement to be noted, however. In early glomerulonephritis when there is extensive glomerular damage and very little in the way of tubular disease, one may see a patient who is azotemic and sometimes even acidotic who has a urinary specific gravity of 1.018 or above. This means that there has been little distortion of the tubular structure in the renal pyramids where



the final level of specific gravity is determined. Also, in renal failure in which heart failure is developing, there is a further reduction of glomerular filtration rate, and there will be a sudden rise in a formerly fixed specific gravity. Here the glomerular filtration volume has been reduced to a point where the remaining tubules are presented with a small load of filtrate and can process a urine of high specific gravity. Therefore, the clinical aphorism that a high blood urea nitrogen coupled with a high specific gravity in a patient with heart failure, means that one need not worry about the status of the kidney, is not entirely true.

Much more frequent and important is the situation in which there is isosthenuria or a fixed specific gravity of 1.010 in a patient who is getting along fairly well. In pyelonephritis, hydronephrosis, polycystic renal disease, and some of the congenital tubular lesions in which the pathology is in the renal pyramid where specific gravity is determined, isosthenuria does not have the same pathophysiologic significance as in a patient with glomerulonephritis. Individuals with these diseases have large volumes of filtrate presented to a tubule which does not properly process it. Therefore, the combination of a small amount of urinary albumin, no or not much urea nitrogen retention in the blood, and polyuria with a fixed specific gravity should lead one to suspect a renal tubular defect. When this combination is found in clinical medicine, careful study of these patients will reveal characteristically that hydronephrosis, polycystic renal disease, pyelonephritis, or some unusual congenital tubular defect such as renal tubular acidosis or one of its many variants, one of the hypercalcemic syndromes, an abnormality of amino acid excretion, etc. are to be found. Thus, a clinician can be guided by careful inspection of "routine" tests when to look for some of these rarities in clinical medicine, the diagnosis of which is such a rewarding experience.

#### *Proteinuria*

Albumin in the urine can come from many sources. It can originate anatomically at any place from the glomerulus to exudate at the urinary meatus. However, in large quantities, albumin originates only in the glomerulus. If one may take the hypothetical example of an

individual with an hematocrit reading of 50% and a serum protein of 7 Gm/100 ml. who is putting out bloody urine with an hematocrit of 2%, and this is very, very bloody urine, such a urine will contain only 28 mg. of protein/100 ml. of urine. Thus, if one does a test for albumin in such a urine after it has been spun down, he will get only a weak reaction. Whereas, an individual with a glomerular lesion such as acute glomerulonephritis with such a grossly bloody urine will have a 4+ reaction for protein on a spun specimen.

On the contrary, in chronic pyelonephritis heavy albuminuria is a relative rarity and isosthenuria with minimal albuminuria tends to suggest a tubular lesion. One is faced with the situation quite often in which there is grossly infected urine which contains a great deal of albumin in the supernatant after the pus has been centrifuged out. Here it is safe to postulate that a kidney devitalized by some other renal disease has had an infection superimposed upon the basic process. This is most often seen in intercapillary glomerulosclerosis or diabetic nephropathy.

The degree of proteinuria tells us nothing of the functional status of the kidney, however.<sup>1</sup> In primary glomerular disease the proteinuria tends to remain relatively constant. This means that as glomerular filtration rate falls with progression of the disease, the amount of protein leaked by each glomerulus increases. Whereas, in both pyelonephritis and nephrosclerosis, as the disease advances, proteinuria tends to decrease which means there is no change of glomerular permeability with a falling filtration rate. Thus, one can see patients in uremia with only a trace of albumin in the urine and patients whose function tests are all normal with a 4+ urinary protein. However, relatively slight proteinuria late in the course of renal disease steers one away from diagnoses such as glomerulosclerosis, glomerulonephritis, lupus, accelerated hypertension, etc.

Postural proteinuria and the relationship of exercise to the renal sediment are important. The usual explanation given for the increase in spill of albumin when some individuals stand erect, is distortion of the renal vein with alteration of filtration dynamics in such a way

that protein is allowed to appear in the tubular fluid. The degree of proteinuria can be very heavy. However, when these individuals lie flat, if they have true postural proteinuria, which is a rare disease, the urine should become totally albumin free. Careful follow up of large numbers of patients with postural proteinuria has revealed that a distressingly high percentage of them develop progressive renal disease if followed long enough and very often the diagnosis of postural proteinuria is in error and the patient has glomerulonephritis.

A few papers have appeared recently in which physicians connected with athletic teams have noted that after very heavy exercise, red cells, protein, and occasionally a red cell cast can appear in the urine.<sup>2</sup> However, in these normal athletes, the exercise has been something in the order of a 15 round professional boxing match, a mile race, or a football game. In true postural proteinuria, the amount of protein in the urine might increase with relatively mild exercise, but if a shower of red cells and particularly red cell casts appears in the urine, with some mild form of exertion such as a few sit-ups, one should suspect such an individual of having active nephritis. Thus, in the workup of the patient with postural proteinuria, careful examination of the urinary sediment in addition to simple tests of urinary albumin should be done after the individual has moved about if one is to be more certain that such an individual does not have glomerulonephritis. This is one of the many situations in medicine in which simple tests might well be implemented by renal biopsy.

#### *Urinary Sediment*

Careful study of the urinary sediment is most informative. In the first place, urine should be centrifuged. Examination of the unspun urine will pick up gross degrees of hematuria and pyuria, but when it comes to the study of casts, urine which has been properly centrifuged is a necessity. Also, it is wise to study such urine with a cover slip on the microscopic slide. In particular, the significance of the red cell cast and the white cell cast, the character of the white cells in the urinary sediment, and the Gram stain should be mentioned.<sup>3</sup>

The red cell cast consists of erythrocytes

embedded in a protein matrix. Thus, it is diagnostic of a lesion of the glomerulus from which both protein and red cells are leaked. (Fig. 1) This occurs characteristically in inflammatory glomerular disease such as glomerulonephritis or lupus erythematosus but in many other conditions as well. These casts have a definite brownish sheen and have been compared in appearance to corn on the cob. They can be found only by looking for them carefully and their importance in the diagnosis of renal disease is great.

White cell casts are polymorphonuclear leukocytes embedded in a cast. (Fig. 1) They are often confused with cellular casts which contain renal epithelial cells. They may be somewhat more difficult to see than red cell

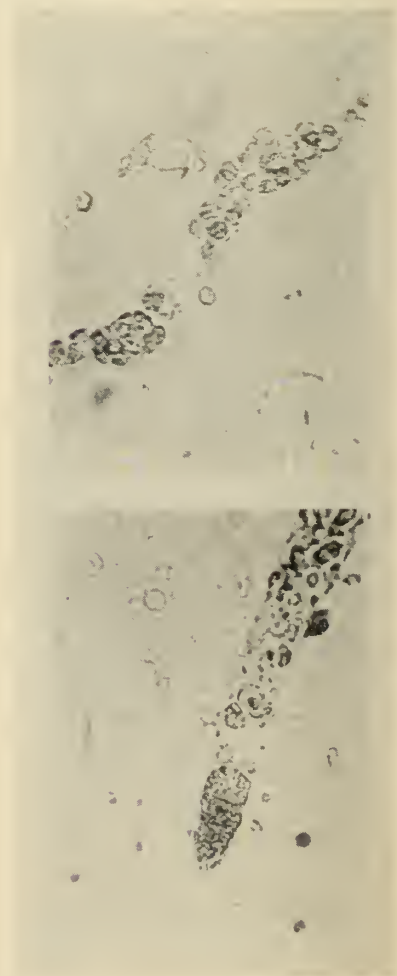


Figure 1. The lower cast is a red cell cast at its lower tip shading into a hyaline cast with cells in it. This sort of cast is seen in active glomerulonephritis. (440x) The upper cast is a pus cell cast from a case of active pyelonephritis. (440x) After Lippman.<sup>3</sup>

casts. They are said to be diagnostic of an inflammatory lesion in the tubular system. This usually means pyelonephritis, and the statement has been made that a white cell cast is pathognomonic of an active renal infection. This is perhaps not completely true, but certainly such a cast should lead one to suspect pyelonephritis and to have the urine cultured.

Much has been made lately of the "glitter cell" phenomenon. When urine is vitally stained with a mixture of a safranin and gentian violet, the polymorphonuclear leukocytes will stain either dark reddish purple or will take a very light violet stain. The dark cells tend to be found in inflammatory lesions of the lower urinary tract and the light pale staining cells are said to be found in inflammatory lesions of the upper urinary tract. The pale staining cells also show Brownian motion of the granules in them. This causes the cells to glitter under the microscope, and hence, gives them their name. These cells by a number of tests have been proven to be living active polymorphonuclear leukocytes.<sup>1</sup> At first, they were thought to occur only in parenchymal inflammation of the kidney. Subsequent investigation has proved that the presence of large numbers of pale staining cells is suggestive, but not diagnostic, of pyelonephritis. Moreover, their absence from the sediment does not rule out pyelonephritis. Certainly, if one has a urinary sediment which contains many of these cells, he should tend to pay more attention to the possibility that there is parenchymal renal inflammation even in the presence of a source of infection in the lower urinary tract. This stain is also useful in that it allows one to differentiate easily red cells and some of the more exotic casts.

#### *Gram Stain*

This is not the place to go into the significance of quantitative urinary bacteriology.<sup>6</sup> However, it has been established now that in the presence of urinary tract infection due to a Gram-negative rod large numbers of bacilli are significant whereas small numbers of bacilli are not. In other words, all positive urine cultures are not positive. A gram stain of the unspun urinary sediment will detect the presence of about 100,000 bacteria/ml. in 85% of the cases. (Fig. 2) Thus, a Gram stain



*Figure 2. Methylene blue stain of an unspun urine in active pyelonephritis. Note the dense concentration of bacilli seen in this oil emersion field. This stain is simpler to do than a Gram stain and requires only flooding of the slide with the stain.*

of the urine is helpful when a urine culture is ordered if quantitative urinary bacteriology is not available. Furthermore, approximately 40% of individuals with active pyelonephritis will have less than 8-10 white cells, HPF. Thus, in patients in whom there is a good possibility that urinary tract infection is present, e.g. diabetics, hypertensives, individuals with a cystocele, elderly patients who have been bed-ridden, men over the age of 65, patients with a past history of genito-urinary tract manipulation, pregnant patients with toxemia, Gram stain of the urinary sediment will disclose a startlingly high incidence of active urinary tract infection in many individuals.

It should be noted also that methylene blue is an excellent stain for detecting bacteria in urinary sediments. Although one cannot tell the difference between Gram negative and Gram positive organisms, the stain does give one an idea of the density of bacteria present. This is a simpler procedure technically. Urine is fixed by heat on a glass slide. The slide is flooded with methylene blue for one to two minutes, dried, and read under the highest magnification available on one's microscope.

#### *PSP Test*

The PSP test has been in use for a long time, but has been falling into ill repute lately. This



test is usually very roughly done and is capable of giving more information than most of us realize. (Fig. 3) Lapiques and Bobbitt<sup>6</sup> have recently correlated PSP excretion with measurement of glomerular filtration rate. Their correlation showed that an excellent PSP excretion does not exist in individuals with very poor renal function. In other words, glomerular filtration rate is maintained in those individuals in whom PSP excretion is good. It is possible for poor PSP excretion to exist when glomerular filtration rate is adequate. Therefore, one can say that if an individual excretes a large amount of PSP in the first 15 minutes after the dye is given (over 25%), there need be no worry about his overall renal function. (Fig. 3) A poor PSP excretion should lead one to suspect the possibility of renal disease and further investigations might be in order. To express this aphorism in the simplest possible terms, if more than 25% of the PSP injected is excreted in the first 15 minutes, glomerular filtration rate can be assumed to be at least 65% of normal or better. This is a particularly valuable preoperative study because it is those individuals who have a decreased glomerular filtration rate who are apt to have postoperative difficulty with water and electrolyte balance. There is, however, only very poor correlation between two hour excretion totals and renal function.

#### Summary

- (1) Careful application of "routine" kidney function tests allows accurate inference of the status of the kidney.
- (2) A fixed urinary specific gravity in the presence of tubular renal disease does not have the prognostic impact of this finding in glomerulonephritis.

#### REFERENCES

1. Latham, W. Proteinuria in renal disease. To be published.
2. Alyea, E. P. and Parish, H. H., Jr. Renal response to exercise-urinary findings. J. A. M. A.: 167, 807, 1958.
3. Lippman, R. W. Urine and the urinary sediment. 2d ed. Springfield, Ill. C. C. Thomas, 1957.
4. Poirier, K. P. and Jackson, G. G. Characteristics of

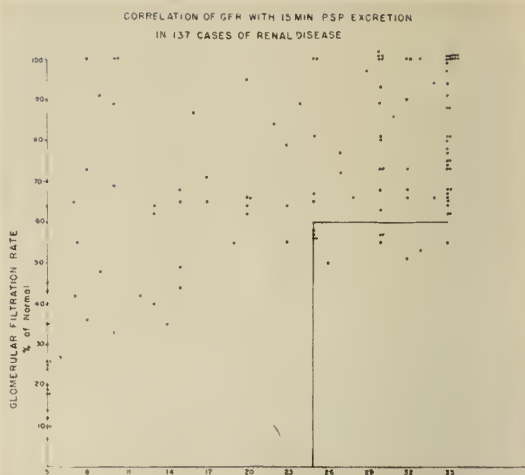


Figure 3. In all but a few cases PSP excretion of greater than 25% in 15 min. correlates with a glomerular filtration rate of over 2/3 of normal. Low PSP excretions may be seen with normal glomerular filtration rates, however.

- (3) Heavy proteinuria is characteristic of glomerular disease.
- (4) To make a diagnosis of postural proteinuria one should examine the sediment as well as determine any change in albuminuria after exercise.
- (5) The degree of proteinuria in no way reflects the functional status of the kidney.
- (6) Gram stain of the urinary sediment is a most useful technique for the detection of asymptomatic bacteriuria.
- (7) A 15 minute PSP excretion of over 25% indicates a glomerular filtration rate of at least 60% of normal. A lower PSP excretion does not prove that renal function is poor, but indicates the need for careful study of renal functional status.

# TEN YEARS EXPERIENCE WITH TUBERCULOSIS IN CHILDREN IN CHARLESTON COUNTY

J. R. PAUL, JR., M. D. AND  
MARJORIE MENGEDOHT, M. D.

*Department of Pediatrics, Medical College of South  
Carolina, Charleston, S. C.*

Our community resources which deal with tuberculosis are listed on the first table. These are probably more than exist in an average community of comparable size in the Southeast. Two reasons for this are that we have a medical school and medical center in the city; and we have a very special doctor who, 35 years ago, took over the full-time professional operation of the Pinehaven Sanitorium. His great enthusiasm and dedication to understanding and practical solution of the problems of tuberculosis coupled with his extraordinary ability, medical and vocal, has probably more than any other factor been responsible for the development of these facilities, and actually the education in tuberculosis of most of the practicing physicians in our state and most of our local lay workers. (We refer, of course, to Dr. W. A. Smith.)

Every community has characteristics and cultural and social differences. The second table gives population figures for Charleston County and City in 1950 and 1960.

A study of our community by the Child Welfare League published in March 1959 emphasized that ours is a "divided or segmented community", in contrast to certain typical midwestern cities "where ethnic ties are less strong, and the predominant symbols of social status are the more changing, fluid symbols of a thriving middle class." This cultural characteristic no doubt has an effect on epidemiology. We cannot say what effect.

Tuberculosis is a contagious disease which is transmitted from open cases to contacts. As Dr. Hsu expresses it "tuberculosis is, for the most part in 'spots'". Efforts at case finding must be directed to the "spots" around the contagious cases.

Since tuberculosis rarely produces overt symptoms of disease before it has produced

serious pathology, it is well understood by all of us that if crippling and death due to tuberculosis are to be prevented, and if healthy children and adults are to be given public health protection, it is essential that all means be taken to find these "spots", ferret out and isolate open contagious cases, and follow-up newly infected contacts (tuberculin converters) with diligence and thoroughness.

Case finding which starts with a tuberculous adult or child is effective and essential.

Case finding by routine or periodic tuberculin test surveys provides another method of finding tuberculous "spots" in communities, and stamping out the contagion and treating other cases and converters in the constellation.

Various speculative figures may be found regarding the percentage of tuberculin positive adults in various parts of this country, and in particular races or groups. It is actually true that in Madison, Wisconsin, when I was a resident, a sick Indian child coming on our wards was considered to have tuberculosis until proved otherwise. Negative proof was rare.

Twenty years ago figures of 50 to 70 and 80% were generally taught in medical schools, and considered more or less "normal".

It is generally stated in the current literature that upwards of 70 or 80% of adults in this country now are tuberculin negative.

This marked reduction in tuberculin positivity in America testifies to the great reduction in the active open case rate due to modern methods of treatment, isolation, and case finding which have been developed and practiced throughout our land.

We know that it is not the routine practice of very many doctors in our community to do tuberculin tests on all children that they see for prophylactic care—i. e. school and camp

checks, etc. — or in differential diagnosis of ambulatory or non-hospitalized illnesses. Percentages of positives would surely be very low.

It is difficult to find authoritative recommendations regarding how frequently children should be subjected to routine case finding techniques. Sentiment for routine case finding, particularly in children, by mass x-ray or photofluorographic methods which recently were so widely used and recommended for use in schools, hospitals, and clinics and other areas has for many good reasons been largely abandoned. Tuberculin testing for screening is far more specific, less dangerous, and less expensive. We believe that it is considered to be an essential routine in pediatric services of all medical school centers to skin test all children above two or three months of age admitted for any reason. This has certainly been the practice of our pediatric service for many years. It is also considered highly desirable that all children coming into the pediatrician's offices or pediatric clinics over the country have a "T.B." skin test at frequent intervals.

Attending physicians in wards and clinics all know what constant preaching and effort is required to insure the faithful application of tests. In most pediatric wards dealing with acute disease — private and service, as well as in the referral type diagnostic centers there is a rapid turnover of patients. If tuberculin tests are not applied routinely on admission virtually upon completion of admission physicals, these vital tests will not be ready even for a 48 hour reading before the patient is discharged.

In clinics it is neither fair to the patient nor can it be tolerated by the clinic load to have all children return 2 or 3 days after initial visits merely and only for reading of tuberculin tests. We all know how unreliable the reporting of results by parents is. We cannot assume that all parents, even "intelligent" parents will bring in all children with suspicious or positive tests. We certainly cannot assume that if they do not come in the test must have been negative. The reliability of such assumptions is, of course, much higher in private practice patients. Despite these difficulties we attempt, and constantly work to carry out

routine testing of all patients in our wards and clinics.

Most pediatricians agree that children who are known contacts of open cases should be skin tested every three months until they convert, or for 2 years after the contact has been broken.

Edith Lincoln implies<sup>1</sup> that all pre-school children should be tested every 6 months on the grounds that chemotherapy should be given for a year to all children known to have converted in the preceeding 6 months. Dr. Hsu<sup>2</sup> states that all school children should be tested annually.\*

The Academy of Pediatrics' Committee on Infectious Diseases does not make any general recommendations regarding routine skin testing, but states that conditions differ in each locality.

The School Health Committee of the Academy, of which one of us is a member, has discussed this subject at length also without making general recommendations for all schools. Theoretical advantages of annual tests for all school children would seem to be obvious.

Our efforts to learn and depict some idea of morbidity rates of tuberculosis in children in our community broken down according to

\*Dr. Hsu has referred the authors to an official statement by the Committee on Tuberculosis and Respiratory Diseases in Children of the American Trudeau Society — *Amer. Rev. of Resp. Dis.*, 81, 446-448 (1960). An excerpt from this report is quoted as follows.

#### TUBERCULIN TESTING

The committee recommends that all children should be tested intradermally with a material equivalent to 5 TU of PPD-S. The first test under ordinary circumstances should be carried out at six to eight months of age; if that test is negative, the test should be applied at least once a year thereafter, unless the child is known—or suspected—to have been exposed to tuberculosis.

In the event of known or suspected exposure to an open case of tuberculosis, a tuberculin test should be administered as soon as possible. If it is negative, it should be repeated as often as every four weeks until it becomes positive or until the longest possible period—three or four months—for the development of tuberculin allergy has passed. In the event that the contact with tuberculosis continues, the child should be tested as often as every month until contact ceases or until the tuberculin test converts. It is not yet certain whether the administration of isoniazid to an infant or young child who remains in constant contact with a case of tuberculosis, but whose tuberculin skin test is negative, will prevent infection or whether the drug merely suppresses infection and postpones the development of tuberculin sensitivity until drug administration is stopped.



TABLE 1  
CHARLESTON COUNTY CASE FINDING  
AGENCIES AND RESOURCES

- I. Charleston County Health Department
  1. Chest Clinic
  2. Public Health Nurses
- II. 1. Pinehaven Hospital
  2. Pinehaven Out-Patient Clinic
- III. Charleston County Tuberculosis Association
  1. Education: Student nurses; Lay
  2. Demonstration Projects
  3. Fact finding
- IV. Hospitals and Clinics
- V. Private Practitioners

TABLE 2  
CHARLESTON COUNTY POPULATION  
FIGURES

	Total	White	Non White
1950	165,000	96,500	68,500
1960	210,000	121,000	89,000
	Charleston City Limits		
1950	70,174	39,287	30,887
1960	60,000	22,000	38,000

three age groups are shown on the following tables.

The table (Table 3) on children in Pinehaven merely shows that practically no pediatric cases are treated in that Sanitorium. We understand that they now have one 4 year old colored child whom we treated for progressive primary pulmonary tuberculosis and discharged to the Pinehaven Chemo Clinic, but who did not get treatment and when sought out was found to be deteriorating in his home.

The next Table (Table 4) shows admissions to ward services under the Pediatric Department (private as well as charity) from

Charleston County in the past 10 years according to age groups — the preponderance of cases in the younger age group (1 - 5 years) in each year reflects the expected increased incidence due to well known increased susceptibility to activity of tuberculosis during the period of rapid growth in infancy and early childhood, contrasted with the much greater resistance to the disease in the school age years. We would undoubtedly find a sharp rise in morbidity during adolescent years if our study had included the years 16 to 20.

Table 5 shows a break down of these active cases according to age, race, and sex.

Table 6 shows children on the Charleston County Case Registry during these same years. This includes all active diagnosed cases from all sources in the county whether hospitalized or not.

The final Table (Table 7) represents three spot check studies by routine tuberculin testing done in the last 2 years (tests were done using 5 T. U. or intermediate strength PPD).

The bottom lines show the number of positive reactions in our out-patient department during the month of April 1960. All children reporting to the sick clinic for any reason that month were tested, and all had their tests read. The readings required a great increase in the work of the clinic, emergency room and visiting nurses during that month. Of the 409 children tested, eleven, or 2.6% are tuberculin positive. Follow-up of these particular eleven

TABLE 3  
TB PATIENTS PINEHAVEN HOSPITAL  
(children 1 - 15 years)

Age - years	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
1 - 5	0	0	0	0	1	0	0	0	0	0
6 - 10	0	0	0	0	0	0	0	1	3	0
11 - 15	0	0	2	3	1	1	1	0	2	5
TOTAL	0	0	2	3	2	1	1	1	5	5

TABLE 4  
TB PATIENTS ROPER HOSPITAL  
(children 1 - 15 years)  
1950-60

Age - years	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
1 - 5	0	5	8	3	8	1	1	3	1	1
6 - 10	1	0	1	1	2	0	0	1	0	0
11 - 15	0	0	1	1	2	0	1	0	3	3
TOTAL	1	5	10	5	12	1	2	4	4	4

children happened not to show any active cases.

The upper two studies shown in the Table are surveys of virtually all of the pupils in a large new Negro high school in the City, (Burke), and a smaller white public high school in the city.

We felt that since these schools serve the teen agers of their respective races from all over the city (practically every ward), and

TABLE 5  
PERCENT TUBERCULOSIS IN CHILDREN  
(10 YEAR STUDY)  
ROPER HOSPITAL

AGE	1 - 5	64.5%
	6 - 10	12.5%
	11 - 15	23.0%
RACE	colored	95.8%
	white	4.2%
SEX	male	54.2%
	female	45.8%

TABLE 6  
SUMMARY CHARLESTON COUNTY TB REGISTRY  
1950-60  
CHILDREN

Age - years	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
1 - 5	6	14	21	10	20	13	16	18	10	20
6 - 10	1	2	2	3	14	4	12	5	4	7
11 - 15	0	1	4	5	5	2	9	1	5	6
TOTAL	7	17	27	18	39	19	37	24	19	33

since tuberculin sensitivity developed in childhood very rarely is lost by high school age, the per cent of reactors in these two schools would give a fairly accurate picture of the percentage of children, white and colored, in our city who have come into effective contact with open tuberculosis during the period of their childhood.

While a one month sampling of our clinic activity may not be sufficient for strong reliability it would seem that the preponderance of the contacts that cause tuberculin sensitization, occur after the pre-school period. Therefore, the high school survey gives a fairly accurate picture of total childhood exposure. Actually, the relatively few contacts that sen-

TABLE 7  
TUBERCULIN SENSITIVITY TESTS

Total Tested	Number of Reactors	Percent Reactors
Burke High School	( 14 to 18 years )	
1256	139	11%
Charleston High School	( 14 to 18 years )	
344	13	4%
MCH Pediatric Clinic	( 1 to 15 years )	
	( Mostly 1-8 years )	
409	11	2.6%

sitize pre-school children account for the vast preponderance of the morbidity in children.

Incidentally, all of the positive reactors in the two high school Groups were followed up. Only one active case was found in the Negro high school, and none in the white school.

REFERENCES

1. Lincoln, Edith M., M. D.: Treatment of Tuberculosis in Childhood. Advances in Pediatrics, Vol. X, 1958. Year Book Publishers, Inc., p. 103.
2. Hsu, Katherine, M. D.: Tuberculosis in Children and Finding Tuberculosis Through Examination of Contacts — A Guide for Public Health Nurses. Revised 1960 — Brochure published by The Texas Tuberculosis Association, 2406 Manor Road, Austin, Texas. p. 8.

# MARFAN'S SYNDROME

JOHN O. FULENWIDER, JR., M. D.

Pageland, South Carolina

Recently I have had in my office six members of a family of seven, four of whom are normal individuals. The father and two sons have ectopia lentis and severe myopia with other stigmata of the Marfan syndrome.

Apparently there are no cardio-vascular manifestations evident as yet in this group. These usually take the form of defective media of the aorta and the pulmonary arteries, producing dissecting aneurysms, dilation or both.

I. The first generation was composed of several normal children about whom nothing is known since they became separated from their two deaf and dumb brothers, one of whom married a normal individual, but no record of their family is available. The other deaf brother married a deaf girl and their descendants are shown above.

II. The second generation produced three normal children, all married.

III. The third generation produced two children with ectopic lentis, one deaf child.

IV. The fourth generation has four children with ectopia lentis, two of whom have received treatment for this condition. The other



Figure 1

Shows father, two affected sons and two normal sons. Not shown in picture is spouse who is normal except for adenoma of the thyroid, and normal daughter, married, with no children. The father and older sons all have lens margins visible through undilated pupils; the father, 44, and the son, 12, are being treated by a local optometrist for severe myopia. All three demonstrate dolichostenomelia. The father has longer arm-to-arm reach than height and greater symphysis-to-sole than symphysis-to-vertex measurements; he has left scrotal hernia. All three have sparseness of subcutaneous fat.



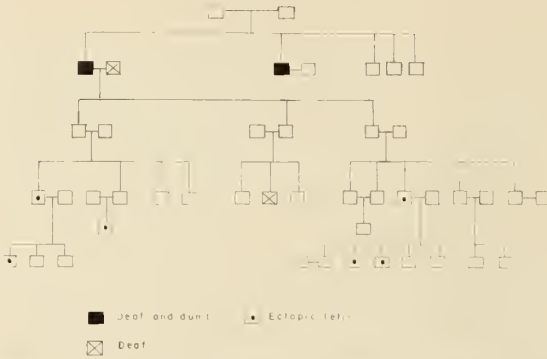
Figure 2

Son, 17, has ectopia lentis, (Fig. 3) arachnodactyly and pectus carinatum (Fig. 4.)



Genealogy of this family below, as near as could be obtained:

There is no knowledge of any pathologic conditions at the beginning of the family represented above.



two children with ectopia lentis are pictured in this article.

### Conclusion

Marfan first described this apparently heritable syndrome of defective connective tissue in 1896. I think it is of interest to all of us in that, in the treatment of the different



Figure 5

X-ray film shows lateral view of chest. Incidentally, this boy has had attempted correction of the deformity of his feet by orthopedic surgery.

entities as they present themselves, it is well to be aware of the total syndrome. I believe these syndromes account for many unexplained deaths in infancy and the fourth and fifth decades of life.

### REFERENCE

Heritable Diseases of Connective Tissue, 2nd edition, by E. A. McKusick, M. D., C. V. Mosby Co.: St. Louis, 1960.

## THE PROMINENT AURICLE

CARTER P. MAGUIRE, M. D.

From the departments of surgery, St. Francis Xavier Hospital and Roper Hospital, Charleston, S. C.

The prominent auricle, commonly referred to as "lop ears", is a frequent abnormality in children and probably the most common deformity involving the external ear. Contrary to general opinion, there is no tissue deficiency but rather a failure of formation of the antihelical fold. There is usually an associated prominence of the conchal cartilage, which, coupled with the absence of the antihelical fold produces the wide, prominent ear which stands out from the skull at almost a right angle. (Fig. 1, Fig. 2)

This deformity is seen in both sexes alike and its etiology remains obscure. Since one commonly sees the defect present in mother-daughter or father-son combinations, it appears to be inherited as a recessive characteristic. Plastic surgical reconstruction of such an ear requires not only the creation of an anti-

The protruding ear in a youngster serves as a severe psychological deterrent to normal associations and development. The operation for the correction of protruding ears, commonly known as lop ear procedure, is outlined and two representative cases are presented.

helical fold but also the resection of a sufficient quantity of conchal cartilage to enable the auricle to lie in its normal relationship to the skull without tension.

Although many methods have been described, probably the most popular procedure is as originally described by Dr. John Staige Davis and Dr. Edward Kitlowski. This "Davis-Kit" procedure limits all skin incisions to the posterior auricular surface. The line of the



FIGURE 1

*A and B—12 yr. old boy with marked protrusion of both ears. Note the absence of the antihelix and the prominent concha.  
C and D—Postoperative results.*

proposed antihelix is tattooed through and through the ear leaving a tract of dye (brilliant green, methylene blue) in the cartilagenous layer for later use. An incision is made on the posterior skin of the ear just posterior to the line of tattoo marks. The anterior flap is lifted and the cartilage is incised along the entire line of tattoo marks. Care must be taken to incise completely through the cartilage but the anterior auricu-

lar skin must not be injured. The posterior skin flap is elevated from the concha and a suitable segment of the conchal cartilage is excised. The antihelix is now sutured side-to-side to the concha using 000 plain catgut. Frequently, it is necessary to remove additional strips from the concha until the desired result is obtained. The reconstructed ear is now sutured to the skull after removal of a suitable segment of postauricular skin. Skin



FIGURE 2

*A and B—9 yr. old girl with protruding ears due to absence of the antihelix and prominence of the concha, particularly on the right side. The condition did not bother the patient until "pony-tail" age.  
C and D—Postoperative results.*

closure is accomplished using 00000 black silk without drainage.

After-care of the patient is important. The initial dressing of cotton balls molded to fit the contour of the reconstructed ear, cannot be duplicated; so it should be left intact until the fifth postoperative day at which time the sutures are removed. After this time, no dressing is required save a stocking-top cap which should be worn over the ears at night, for a period of two weeks.

Although many other birth deformities are more extensive and mutilating, none produce

a more psychologic withdrawal than "lop ears". Most male children admit that they've had to fight every boy in the county, at one time or another, because of teasing. The deformity can be more easily hidden in girls but sooner or later it seems they all must have a "pony-tail". The best age for operation is at five to six years so that the deformity can be corrected before the child begins school.

#### Summary

Two cases of prominent auricles, one male and one female, are presented with a brief description of the operative technique.

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## Book Reviews

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*PRINCIPLES OF SURGICAL PRACTICE* by E. Marcus, M. D., Ph. D. and Leo M. Zimmerman, M. D. Blakiston, New York, 1960. Price \$12.50.

The authors have set out to condense the vast field of modern surgical knowledge into a volume of practical size. They have done this very well. While aimed at the student or trainee, this book will be useful to the doctor in practice as well. A full summary of principles at the end of each chapter is a fine addition for a teaching text. The illustrations are well chosen and the index is adequate.

Fred Kredel, M. D.

*CURRENT SURGICAL MANAGEMENT II* by John H. Mulholland, M. D., Edwin H. Ellison, M. D. and Stanley R. Friesen, M. D. 348 pages. W. B. Saunders Company, Philadelphia, 1960. Price \$8.00.

This second volume with contributions by 50 authorities presents contrasting views on the treatment of a number of common surgical problems. Most of the chapters are related to abdominal surgery with individual views on the best methods to handle complicated situations. This type of frank opinion sums up "what to do" in a manner highly useful to the practicing surgeon. Each chapter contains references to recent literature and the editors have added brief but cogent remarks. We know that doctors disagree and here they spell out in detail their reasons. This is a highly instructive volume at the modest price of \$8.00.

Fred Kredel, M. D.

*OCCUPATIONAL DISEASES AND INDUSTRIAL MEDICINE.* Rutherford T. Johnstone, M. D. and Seward E. Miller, M. D. W. B. Saunders Co., Philadelphia, 1960. Price \$12.00.

The increasing emphasis on occupational disease

and industrial medicine, from the standpoint of prevention of accidents and illness and the reduction of absenteeism, as well as the relationship of industrial exposures to disease, has demanded of a larger and larger number of physicians extensive knowledge in these continually broadening areas. This publication by two well qualified authorities in the field of industrial medicine and public health has been stimulated by the obviously increasing importance of this field and the continuing development of new chemicals and new processes in industry. A book on a similar subject has been published previously by one of the authors.

The book is divided into two parts. Part I is a discussion of the practice of industrial medicine, its scope, the place of the physician, his responsibilities, and his associates the nurse, the hygienist, and others. Workmen's compensation and physician's relationship in this field are discussed. The problem of the handicapped worker and the importance of efforts at rehabilitation of the individual in this category are emphasized. Part II is devoted to the discussion of the occupational diseases and the industrial agents responsible for them. The newer chemicals, radio-active materials, rocket propellants, and other currently important agents and processes in industry as well as in agriculture to which workers are exposed are discussed from the standpoint of the industrial physician, with the presentation of the clinical picture of the illnesses, the prevention, the treatment, and the disability caused by such agents. This book is a valuable addition for the library of the industrial physician as well as for any physician whose practice includes individuals employed in present day industry.

Kelly McKee, M. D.

(Book Reviews Continued on Page 92)



# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA



### ELECTROCARDIOGRAM OF THE MONTH

#### Digitalis Toxicity

DALE GROOM, M. D.

Department of Medicine

**Case Record**—A sixty-eight year old man with a long history of asthma and of coronary occlusion several years previously followed by angina, was admitted to the hospital in advanced congestive heart failure. So far as could be determined he had taken a total of 2.4 grams of digitalis during the preceding four days. Only when he became severely ill with nausea and vomiting was he brought to the hospital.

Treatment consisted mainly of administration of diuretics, aminophyllin and potassium. Inadvertently a small amount of additional digitalis was given. He lost ten pounds of edema fluid within 48 hours, showed some clinical improvement as regards his congestive failure but died suddenly on the fourth hospital day. Serum values of sodium, potassium and transaminase were within the normal ranges throughout.

An ECG on admission disclosed paroxysmal atrial tachycardia with a prolonged P-R interval and a ventricular response rate of 160 which dropped to 80 following carotid sinus pressure. Additionally there were frequent ventricular ectopic beats, loss of R waves in some precordial leads consistent with a previous anterior wall infarction and intermittent runs of ventricular tachycardia. The strips of lead 2 illustrated below were recorded on the last two days of life.

**Electrocardiogram**—The rhythm on Aug. 27 appears to be a regular sinus one at a rate of 120 with prolongation of the P-R interval to 0.24 (first degree AV block). The QRS is widened to 0.10, consistent with the quinidine effect or perhaps a peri-infarction block. Configuration of the T waves is characteristic of that caused by digitalis, and they merge with the following P waves.

Quite different P waves are evident the following day. They are smaller and their rate is 175, indicative of a paroxysmal atrial tachycardia. For a while the ventricles respond to only every other P wave (2:1 block) with a minor change in ventricular conduction producing small Q waves and further widening of the QRS. Interspersed are occasional ectopic beats of ventricular origin and finally a long run of ventricular tachycardia, its rate just a little slower than the P.A.T. (about 165). Though they look somewhat similar, these QRS complexes are widened to 0.12.

**Discussion**—This case illustrates several of the electrocardiographic features of digitalis toxicity. To begin with, the patient had frequent ventricular ectopic beats (multifocal in origin) in several tracings, delayed AV conduction, then paroxysmal atrial tachycardia with block and ultimately a ventricular tachycardia. It is likely that the terminal event was the final stage of myocardial irritability, that of ventricular fibrillation. The usual S-T and T wave changes of digitalis effect were of course evident throughout in the complete ECG. The progression through the stages of ventricular ectopic beats, ventricular tachycardia and finally ventricular fibrillation is virtually classical for digitalis toxicity, and the P.A.T., the AV block and other signs lend additional support to that diagnosis.

As in acute myocardial infarction or general anesthesia, ventricular ectopic beats have a special significance when they arise as a result of digitalis administration. Commonly, toxic levels both delay AV conduction and enhance myocardial irritability. Whether the latter is accomplished by its action in driving the potassium ion out of the cell or not, there is abundant evidence that depletion of intracellular potassium greatly increases the cell's susceptibility to digitalis toxicity so that administration of potassium (particularly in patients whose K stores have been depleted by diuretic therapy) is of prime importance in treatment.

Similarly, paroxysmal atrial tachycardia, which is regarded as a relatively benign arrhythmia of young subjects with presumably normal hearts, frequently is an ominous sign when it appears for the first time in an elderly individual. Either coronary disease or digitalis can cause it. In the latter event there is commonly an associated AV block and it signifies a near lethal level of digitalis toxicity.

Worthy of re-emphasis occasionally is the fact that these electrical manifestations of digitalis intoxication can appear before the subjective ones. Some patients simply do not experience the progression of anorexia, then nausea, and vomiting and yellow vision prior to reaching a dangerous stage of arrhythmia, so variable is the individual response to digitalis. Furthermore it is accepted practice in many circles to push digitalis cautiously to the point of toxicity in order to determine what is the patient's true maintenance dosage. And there is some justification for this in cases where it is essential that a full therapeutic effect be achieved. Moreover, many patients taking the drug over long periods of time inevitably encounter toxic levels for one reason or another, and something can be said for familiarizing them with the warning symp-

tons as a safeguard. In such a situation, the ECG may disclose the therapeutic endpoint before the awaited symptoms appear.

Arguments continue to be heard (usually with very tenuous evidence) that certain digitalis preparations have wider "safety margins" than others, with the implication that they are capable of attaining greater therapeutic effects before toxicity is reached. Of far greater importance in therapy, however, is early recognition and treatment of digitalis toxicity—and some appreciation of the relative rates of excretion of the different preparations.

The incidence of digitalis intoxication is probably much higher than is generally supposed. There is the elderly patient with impairment of recent memory who forgets that he has taken his medication and so takes it again. There is the less enlightened patient who reasons that if one tablet a day is good, two or three will be better. And there is the prescription collector who shops from doctor to doctor ending up with two or more prescriptions for preparations of the same drug. The very schedule of digitalization with multiple doses for the first few days is conducive to confusion unless carefully explained and set forth on the label. Prolonged usage of diuretics and low sodium diets can precipitate toxicity on the same dosage of digitalis the patient may have tolerated well for months. And on the physician's side is the ever present hazard of administering a digitalizing dose in the emergency room to the patient who unknowingly is already on the drug — (it is remarkable how little some patients seem to know of the identity of medications they are taking). Though by no means infallible, the ECG will usually show some indications of digitalis effect if the patient is or recently has been under treatment with it. A safe rule is to always take an electrocardiogram before administering digitalis.

## THE CHANGING IMAGES OF DOCTORS TODAY

Woodrow Wirsig  
Editor, *Printers' Ink*, New York

How often lately have each of you heard someone say "Oh, you are a wonderful doctor". Often? I hope so, for every person likes to be needed. But I'm sorry to say that no matter how often an individual may praise you, society in general is changing its attitudes about doctors.

What we might call "an increasingly bad image" about doctors is emerging. This image can, if unchanged, interfere with doctor's work, with the continuing progress in medicine which doctors have come to expect automatically from our social order, and with his future as a scientist.

Now, what do I mean by "image"? We in com-

munications are using "image" to mean *something that people think is so — whether it really is or not.*

I wanted to find out what the changing images of doctors are today. So I made another survey. This is the third survey I've done on this subject in the last two years. My purpose each time was for an address to a major medical group.

My first survey was among editors of important magazines published nationally in America. Editors are sensitive to what their readers are thinking, and want. Besides, they feel a responsibility to help educate their readers. I wanted to know what they were thinking about doctors today.

My second survey was to find out how the doctor and his wife are regarded in their communities.

This third survey was made a month ago. I talked with two groups of people:

1—A group of educated people, those who had at least an A.B. degree from college. Among them were teachers, business men, ministers, editors and writers, and doctors themselves.

This is an abstract of a talk presented at the Southern Medical Association-Merrell Medical Economic Symposium, St. Louis, November 3, 1960.



2—A group of non-professional people, intelligent but generally uneducated. They included milk delivery men, gardeners, maids, lathe workers, mechanics, service station attendants.

This survey, like the others, was a small one. I could not go to any great expense for it. But as a kind of pilot study, made carefully to elicit genuine attitudes and not what the people thought I wanted to hear, it could serve as an indication of a problem doctors would be wise to explore.

What, now, IS the image that seems to exist in people's mind?

It's interesting, to me anyway, to see how an image changes and grows. Two years ago, the editors I talked with said their readers admired doctors as scientists. But they complained that doctors were getting more impersonal. Doctors, they felt, seemed more concerned about money than explaining an illness. These readers had a growing fear that illness would eat up all their savings.

A year ago, I found that the people in the particular community I studied admired doctors for their skill and ability. But they not only felt that doctors didn't talk to them enough, but they also were developing *strong resentment* toward doctors. They had a right to know what ailed them, they said, and doctors brushed them off. Their resentment spilled over toward the doctors' wives.

Today, among the educated group I surveyed, I discover that they regard doctors as better scientists than ever before. They also feel that doctors seem less prejudiced, less rigid in their thinking and approaches to illness. Doctors, they say, seem more receptive to new ideas and new techniques than ever before. Also, they feel that the doctor today regards himself as less omniscient, even more humble, in the face of widening frontiers of knowledge.

On the other hand, they think he is much less of the family physician than ever before. They think they understand *why* doctors are this way. They believe that a doctor's growing concern for more knowledge, more work because of more patients, and worry over rising costs and prices on every hand — while his own prices are difficult to raise — tend to make him what he is today. Being more remote, the doctor is less communicative. In treating his patients impersonally, he tends to increase their fears about themselves, increases their anxieties and heightens their resentment toward the doctor in personal relationships.

There's no question, of course, but that a better educated public has more curiosity. As cities, industry, living and medicine get more complex, doctors can not always come up with a simple explanation. Pressures of time, more patients, distance, keeping up his education and work in the hospitals, all keep today's doctor from talking things over with patients as much as he wants to.

Among the people with a high school education, or less, I discovered that they now regard their doctors with outright hostility. A doctor is someone to avoid going to, if at all possible. When they do go, they regard him as a high-priced mechanic who should fix their problem with an injection. They tend to look for something, or someone, to solve their fears of high medical costs.

This introduces a new element I found this year: More than half of the people in both groups said that they wanted the Government to set up some kind of a program so they wouldn't have to worry about medical bills and ill health. It would all be taken care of for them.

This, then, is a troubled image. Clearly the people's temper seems demanding. They want something done. And this is a challenge to medicine today — a challenge to act.

All over the country, evidence is piling up that some kind of planning is necessary. Yet in most of the medical journals I read I keep seeing articles that criticize change . . . they bewail the growing hostilities toward doctors. They do not face up to the problem expressed by the President's own Commission on the Health Needs of the Nation, which said "The genius for organization, so characteristic of American life in general, is conspicuous in health services by its absence. The increased complexity of health service . . . makes it increasingly apparent that some order must be achieved".

So today, the images in the minds of different segments of society present doctors with a great challenge. Their whole way of life is on the verge of being changed. Unless *doctors themselves* find a way of meeting this challenge, someone else will do it for them — probably not nearly as well as the doctors could do it themselves.

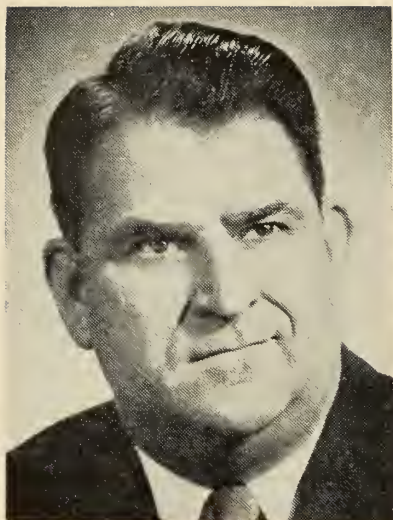
What I propose is in line with people's emerging insistence on a national purpose . . . on solving domestic and international problems without resorting to force . . . in line with a new dynamics that seems to parade American education, communications and marketing here and abroad.

Health care is a matter of right — and doctors must take the initiative in forming whatever is necessary to provide it. For if they don't someone else will.

The reasons why I urge you so vigorously to do these things on your own behalf is that I feel so strongly that I know how valuable you really are to society. You are in a great new era, a golden era of knowledge. Never has medicine been more intelligent, more skilled.

I urge all of you to apply these same skills and resourcefulness to solving some of the social and economic problems surrounding medicine today.





# President's Pages

## THE ANNUAL MEETING

This month I want to call your attention to our Annual Meeting which is going to be held in the Francis Marion Hotel, in Charleston, on April 25, 26 and 27, 1961.

Council will meet Tuesday morning at 9:00 A. M. It will also meet each day during the meeting.

The House of Delegates will convene Tuesday afternoon, promptly at 2:30. There will be a special order at 4:30 P. M., Tuesday, at which time the House of Delegates will sit as the Corporation of Blue Shield. *This is the time for the Delegates to present any resolutions or discuss any problems that have come up in their counties concerning Blue Shield.*

The Reference Committees will meet at 5:30 P. M. The following Reference Committees will be appointed and pertinent resolutions referred to the respective groups:

1. Reports of Council and Officers.
2. Legislation and Public Relations.
3. Public and Industrial Health.
4. Amendments to the Constitution and By-Laws.
5. Insurance, Blue Cross, and Blue Shield.
6. Miscellaneous Business.

Please take note of these committees so that you might appear before them and discuss any resolutions you might be interested in.

The House of Delegates will re-convene Friday at 9:00 A. M. and continue until Noon.

A great deal of planning has gone into this meeting by our Scientific Program Committee. Dr. R. Cathcart Smith, of Conway, Chairman, and Drs. Dessie Gilland and Walter Mead — other members of the committee, have come up with what I consider to be one of the most unique programs ever put on by the South Carolina Medical Association.

The Scientific Program will start Wednesday afternoon, promptly at 2:20 o'clock, with the presentation of papers from doctors in South Carolina. According to the present schedule we will have one out of state surgical speaker, also, on that afternoon. Following these papers and as a conclusion to the afternoon session will be a panel on "Jaundice".

The big day will be Thursday. The Medical College of the University of North Carolina has agreed to take over the program for the entire day. Just what they will talk about we do not know at the present time. However, we do know that they will present their top-notch men and emphasize particularly the fields in which they have done research and special work. The Thursday session will also be concluded with interesting panel discussions, the subjects of which are yet to be announced and which probably will be divided into 2 sections so those interested in medical problems might not be bored by a surgical presentation and vice versa.

Also, during both days, interesting moving pictures on medical subjects will be run continuously on a time schedule, with subjects announced, so that we will be able to take full advantage of the films which might be of particular interest to us.

The Ladies Auxiliary plans a full schedule for their members who are in attendance, and have made special preparations and plans for entertaining the wives of the visiting speakers.

As has been the custom for many years, the Alumni Association of the Medical College of South Carolina is in charge of the social functions of the meeting. This year, in addition to the Annual Alumni Lunch Wednesday at noon, the dance and entertainment on Wednesday night and the Banquet on Thursday night at which time the Alumni Association honors the President of the South Carolina Medical Association, it will also sponsor a breakfast Thursday morning. Please plan to attend this breakfast as the guests of the Alumni Association, so that we might start the day off with a full house. After breakfast the report of the Memorial Com-

mittee will be heard and, also the Presidential address. We hope that this innovation will assure a sizable attendance for the early papers on Thursday morning, which have been so sparsely attended in the past. More often than not, the Association has been very embarrassed to have so few members present for the opening papers Thursday morning. This rudeness has not gone unnoticed by our guests.

Out of the plans for this meeting has come a recommendation from the Scientific Committee that the By-Laws of our Association be amended so that the Scientific Committee become a permanent committee, rather than a regular committee appointed each year. The idea would be that one member of the committee would go off each year, and a new member appointed. In this way there would be a continuity of thought from year to year. The advantage of such a plan is obvious when we realize the many problems confronting the committee: To avoid duplication — to insure securing a particular speaker who may not be available this year, but could be obtained next year, etc. — so that some variation in scientific material might be planned from year to year.

We hope that the Delegates to the Convention will be thinking about this and it might be favorably received. Particularly is this important if the Guest Medical College Program works out well and we wish it to be continued.

Plan now to attend. The Francis Marion is the Headquarters Hotel.

Joseph P. Cain, Jr., M. D.

#### CHANGE IN LAW BEING SOUGHT

A change in South Carolina law requiring that state aid to county health departments be made on the basis of population is being sought by the State Board of Health.

State funds to county health departments are distributed at present on a population basis according to the 1950 census, in addition to a flat \$11,500 grant.

Beginning this year, however, funds would have to be distributed according to the 1960 census, which would mean that 21 counties would get less money because they lost residents during the last decade.

Dr. G. S. T. Peeples, State Health Officer, said the Board of Health is asking for the following: that the present appropriation to all counties remain the same and be used as a minimal base rate. If this is done, money can be appropriated to counties in which it is needed and will do the most good and not be spread out over all the counties in amounts so small that needy counties would not benefit.

Dr. Peeples said three provisos in current law are in question. The proposed substitute provisos would ask that no county receive less than it is getting now. The proposal, he said, also would ask that "federal funds made available to the Board shall be distributed among the counties on a basis so that no county shall receive more federal funds until each county has re-

ceived an amount equal to those amounts made available for the fiscal year 1960-61."

The Board has asked for an appropriation of \$2,833,700 for the next fiscal year, \$108,697 more than the current period.

#### PRIVATE MEDICINE

Though modest in seeking personal publicity, South Carolina physieians are right to raise their voices in behalf of their profession. The private practice of medicine like other aspects of private enterprise, requires constant defense.

The South Carolina Medical Association has offered to provide speakers without cost to civic and cultural groups in the Charleston area. The speakers will be drawn from the Charleston County Medical Society. They will attempt to explain the doctor-patient relationship, and other phases of private medicine.

We welcome this method of reaching the public ear. We invite public attention to what the doctors say. They represent a highly selected and well educated branch of society. They are good citizens as well as scientists. As a class they are among the leaders of any community. We would not want them to be swallowed up in the welfare state.

—*News ad Courier*  
(Charleston) Dec. 31, 1960



*attains  
sustains  
retains*

*extra  
antibiotic  
activity*

# DECL

*attains* activity  
levels promptly

**DECLOMYCIN** Demethylchlortetracycline attains — usually within two hours—blood levels more than adequate to suppress susceptible pathogens—on daily dosages substantially lower than those required to elicit antibiotic activity of comparable intensity with other tetracyclines. The average, effective, adult daily dose of other tetracyclines is 1 Gm. With DECLOMYCIN, it is only 600 mg.

*sustains* activity  
levels evenly

**DECLOMYCIN** Demethylchlortetracycline sustains through the entire therapeutic course, the high activity levels needed to control the primary infection and to check secondary infection at the original—or at another—site. This combined action is usually sustained without the pronounced hour-to-hour, dose-to-dose, peak-and-valley fluctuations which characterize other tetracyclines.

TETRACYCLINE  
ACTIVITY  
WITH  
DECLOMYCIN  
THERAPY

DOSAGE  
150 mg. q.i.d.

TETRACYCLINE  
ACTIVITY  
WITH OTHER  
TETRACYCLINE  
THERAPY

DOSAGE  
250 mg. q.i.d.

DECLOMYCIN—SUSTAINED ACTIVITY LEVELS

OTHER TETRACYCLINES—PEAKS AND VALLEYS

POSITIVE ANTIBACTERIAL ACTION

PROTECTION AGAINST PROBLEM PATHOGENS



# DECLOMYCIN<sup>®</sup>

DEMETHYLCHLORTETRACYCLINE LEDERLE

*Retains activity*  
levels 24-48 hrs.

**DECLOMYCIN** Demethylchlortetracycline retains activity levels up to 48 hours after the last dose is given. At least a full, extra day of positive action may be confidently expected. The average, daily adult dosage for the average infection—1 capsule q.i.d.—is the same as with other tetracyclines...but **total** dosage is lower and duration of action is longer.

**CAPSULES**, 150 mg., bottles of 16 and 100. **Dosage:** Average infections—1 capsule four times daily. Severe infections—Initial dose of 2 capsules, then 1 capsule every six hours.

**PEDIATRIC DROPS**, 60 mg./cc. in 10 cc. bottle with calibrated, plastic dropper. **Dosage:** 1 to 2 drops (3 to 6 mg.) per pound body weight per day—divided into 4 doses.

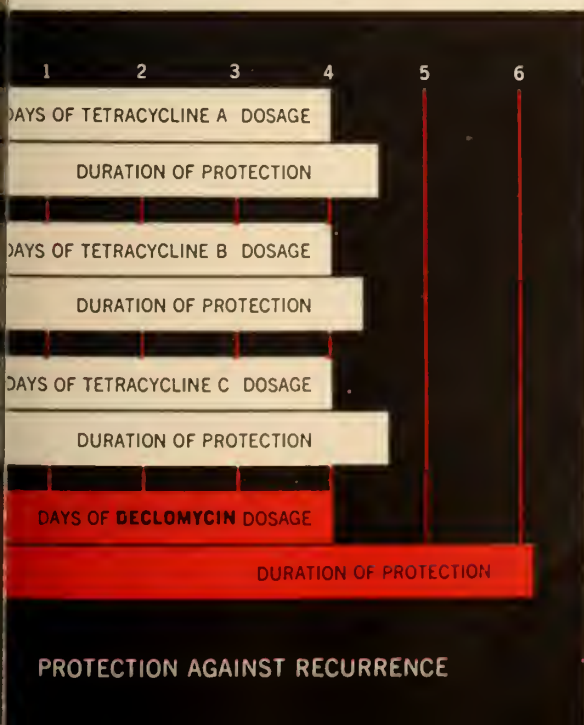
**SYRUP**, 75 mg./5 cc. teaspoonful (cherry-flavored), bottles of 2 and 16 fl. oz. **Dosage:** 3 to 6 mg. per pound body weight per day—divided into 4 doses.

**PRECAUTIONS**—As with other antibiotics, DECLOMYCIN may occasionally give rise to glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis or dermatitis. A photodynamic reaction to sunlight has been observed in a few patients on DECLOMYCIN. Although reversible by discontinuing therapy, patients should avoid exposure to intense sunlight. If adverse reaction or idiosyncrasy occurs, discontinue medication.

Overgrowth of nonsusceptible organisms is a possibility with DECLOMYCIN, as with other antibiotics. The patient should be kept under constant observation.



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# Editorials

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## DR. CRAWFORD UPHOLDS THE FAMILY PHYSICIAN

In his address as chairman of the section on general practice of the American Medical Association, Dr. R. L. Crawford of Lancaster, a recent president of the Association of this state, paints a picture of the continued importance of the family physician, who can meet 85% of the needs of his patients. Dr. Crawford emphasizes the close personal relationship which is necessary for proper relations between doctor and patient and views the family physician as something much warmer and more human than the medical statistician or high level professor in his ivory tower. The general practitioner, he says, should and does engage in a good many activities which are not strictly medical, he becomes an important member of his community in ways not related directly to his practice and he acts as wholesome leaven in the body politic. He does not view with the prevailing alarm the decline in the number of these essential practitioners and points out that there are more than 25,000 members of the Academy of General Practice. At the same time he shares the concern that has been expressed by many that there is a great need for a larger number of young men to enter the practice of medicine in general, and general practice in particular.

Dr. Crawford believes rightly that the general practitioner can do far more to promote good public relations than can the casual specialist who sees the patient only occasionally, and more than the remote consultant who has little lasting personal contact with the vast body of patients.

Dr. Crawford also believes that the establishment of a Board of General Practice would add an incentive to the choice of this general specialty. He thinks that a training period of two to three years after graduation would be adequate preparation, providing the training was arranged to cover those portions of prac-

tice which would be essential to the performance of the best sort of work as family physicians.

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## MADISON AVENUE GOES TO MISSISSIPPI

The October number of the *Mississippi State Medical Journal* reports—without comment—a new stunt in “public relations” as follows:

*Exclusive 'Medical Club' Organized in Coahoma County*

Clarksdale — Most popular status symbol among Coahoma county small fry is “Tonsils Out Club,” membership limited to tonsilectomy patients under 12 years old. Upon hospital discharge, youngsters receive special gold and black certificate signed by attending physician and administrator . . . in witness of bravery” and lapel button.

This editor is inclined to think that it would be more appropriate to give similar awards for wisdom and agility to those youngsters who have managed to escape this overworked operation.

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## AUTOGENOUS VACCINE THERAPY IN STAPHYLOCOCCIC INFECTION

An article with the above title offers some encouragement to those who have struggled in the past with the eradication of staphylococic infections in the form of furuncles. Auto-genous vaccines have been used liberally, but the rather enormous number of doses usually prescribed and the relative expense have not made them popular with either patient or physician. Use of stock staphylococcus toxoid has also enjoyed a certain amount of popularity, but here again the process of administration was slow and not always as satisfactory as might be hoped.

This paper gives a report on 60 cases of staphylococcus infection with coagulase positive *Staphylococcus aureus*. Of the 60 cases treated 44 had excellent response, 11 patients showed improvement and there were only 5 instances of failure. This is a far better box

score than can be chalked up for the older approaches. The technique of preparation of the vaccine is thought to be the explanation of its efficacy.

One of the most pleasing features of the use of this special type of vaccine is the reduction of the number of injections. Ten injections are considered to represent an average course of treatment. Occasionally it was found necessary to add a few extra doses or repeat the course but this was an unusual situation. No systemic reactions were observed in any case. This method of preparation of vaccine and the schedule of treatment would certainly seem to warrant extensive trial of what appears to be a great improvement over older methods.

*J.A.M.A.* 174:35 September 3, 1960.

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### THE CASE OF IRON-DEXTRAN (IMFERON)

Until recently this preparation has been in wide use and has been productive of very satisfying results in the correction of simple anemia. There have been no ill effects reported, and the process of elevating the hemoglobin and red blood count has been so much more rapid than could be achieved by oral administration of iron that the solution had become a very popular one with the practitioners, particularly with pediatricians. A short time ago the appearance of a report on experiments in rats and mice in which the repeated injection of massive doses of Imferon into the same site resulted in the development of local sarcomas in a high percentage of the animals was responsible not only for putting a damper on the enthusiasm of those who were using the drug but also in withdrawal of the preparation from the market. Whether these remotely applicable experiments could be interpreted in terms of human response is quite a debatable question.

The producer of the preparation obviously must have suffered tremendous financial loss, and the pediatrician felt intense disappointment that a substance which to him had seemed to be an extremely valuable one had been officially denounced by the Food and Drug Administration. Most of the pediatricians felt that the rapidity of response was the most valuable and desirable feature in the use of

this drug. No one has yet reported any real ill effect in humans which could be attributed to it.

Editorial comment in the *American Journal of Diseases of Children* deals with the use of Imferon and is rather critical of the way in which it has been used generally by the profession. It may be true that it has been given indiscriminately but so have many other drugs of much more dangerous potentiality. Certainly it should not be given without proper indication, but in the right place it has been a very valuable tool. Those physicians who have poured pills and iron solutions into patients and waited hopefully for a reasonably quick rise in hemoglobin were particularly pleased when they found that in many instances a rapid benefit could be achieved in patients who might otherwise have had to postpone anesthesia, surgery, and other urgent processes.

It is to be hoped that there will be an official review of the questions of the theoretical dangers associated with the use of Imferon and that the judgment of the authorities will be that it may be returned to its very useful function in the treatment of simple anemias.

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### INFANT MORTALITY IN SOUTH CAROLINA THE CHANGING PICTURE

Not long ago the South Carolina State Board of Health issued a summary of the figures having to do with infant mortality in the state in the year 1958. Comparison with figures of twenty years ago shows a very heartening improvement in many respects and certain rather definite changes in the elements which go to make up the total mortality.

Over the twenty year period there has been a very considerable drop in the total infant mortality rate, that is in the number of deaths under the age of one year per thousand live births. The figure has fallen from 80 to the far more respectable level of 24.3, which represents 1,092 fewer deaths in 1958 than in 1938. This figure no doubt reflects increased activities in health department matters, and improved general knowledge and techniques



in medicine. For instance, one factor may have been the advent of the antibiotic drugs and their widespread application.

Another factor may be seen in the radical change in the use of hospital facilities, as indicated by the tremendous increase in the number of deaths which occurred in hospitals and the tremendous reduction in the number which occurred in homes. Obviously the sickest infants were taken to the hospitals and the widespread use of hospitals for obstetrical services would also account for a very large part of this variation. Later figures show more than nine times as many deaths in hospitals and a reduction of deaths in homes to figure somewhat more than one-fourth of the total recorded in 1938.

In the older reports of mortality there was a somewhat appallingly high percentage of infant deaths recorded at which no medical attendant was present. Twenty years ago more than one third of the deaths were classified in this way. Now less than one-tenth of the total lack medical care. Even so, this is a very large figure, and points probably to lack of available medical care and a lack of understanding of the urgent need by certain less knowledgeable classes of parents, and also to the lack of facilities for care for a variety of other diseases incidental to the early period of life.

In the earlier report of 1938 there were 889 deaths attributed to prenatal and natal circumstances. This figure has actually risen to 1212, and has assumed the position of practically sixty percent of the total number of infant deaths as the causes more active in previous years have been controlled and deaths have declined in that category. For instance, deaths due to gastrointestinal diseases have declined from 425 to 95, from communicable diseases in infants from 354 to 67, from prematurity from 619 to 394. This last is still an excessively high figure. Accidental deaths in infancy have risen somewhat. Improvement in keeping records and probably in medical care and knowledge is represented by a drop in that unsatisfactory category of "ill defined" deaths from 961 to 175.

The lessons of this comparison seem to point largely to the necessity for intense concentration on prenatal and natal factors, and thus

seem to place a certain burden on the obstetrical attendant rather than on the pediatrician, or general practitioner, whose skills can not mend what has been irretrievably damaged. This does not imply that obstetrical skill is lacking, but points to the area in which improvement may be expected.

Included in this thought was the fact that immaturity in some degree was associated with 37% of the total number of deaths reported.

The Division of Maternal and Child Health of the State Board of Health is to be congratulated on these ably presented reports and for its deep concern for the problems which they point out. These same problems concern every practitioner who handles infants in any way, and offer a challenge which he has met well in the past and will meet even better in the future. Studies of perinatal mortality now current in many hospitals of the state represent a move in the right direction.

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#### SOLVING THE PROBLEM OF THE CRIPPLED

Action undertaken by the professions, religious, labor, industry, business, government and other groups supporting programs for the rehabilitation of the physically handicapped points up crippling as one of our most important health problems of the day.

Medical science is providing cures for once fatal diseases which now leave in their wake many persons who must live with handicapping conditions. The Easter Seal Society tells us that 8½ million Americans suffer from one type of crippling or another and that one family in every five finds it necessary to fight back against a physical disability of one of its members.

Treatment, research, prevention and education are among the major weapons for attacking this vital problem. We can think of no other organization that is using all of these resources more effectively than the National Society for Crippled Children and Adults and its Easter Seal affiliates in all parts of the nation.

At present, a quarter million crippled children and handicapped adults are under treatment or are receiving rehabilitation services

of many kinds ranging from nursery school through the various therapeutic techniques to training for and placement in appropriate employment.

When the 1961 Easter Seal campaign opens March 2, it will mark the 40th consecutive year of service to the crippled by the National Society. Its Easter Seal affiliates operate and co-sponsor a network of more than 1,400 centers and programs offering direct services to crippled children and adults regardless of race, creed, or cause of crippling condition.

Continuing through Easter Sunday, April 2, the 1961 appeal will seek the financial support to carry on this fight against crippling. Contributions to continue this important work is one of the best ways we know to get the problem of the crippled solved, to assure treatment, education, employment and acceptance of our handicapped friends, neighbors and relatives.

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#### PUBLIC RELATIONS — SPEAKERS BUREAU

The Public Relations Committee of the South Carolina Medical Association was instrumental in presenting recently, with the very considerable help of the local members, a number of television programs which seemed to be well received. They dealt with subjects which were of common interest to the profession and to the public, and the comments have been quite favorable and encouraging.

At the end of the past year it was decided to discontinue the television shows for the present, except perhaps to use very short spot appearances of physicians on their local television stations' news programs, and to concentrate efforts on setting up a state-wide speakers bureau. The purpose of this bureau is to furnish speakers on subjects similar to those used on the television programs for any civic organization, or, in fact, wherever an audience can be found. Response from the county societies over the state was not uniform, and only some twenty counties offered to participate and designated local chairmen for that purpose. It is hoped that all of the other counties will in time join this effort.

It appeared that requests were not coming in spontaneously in sufficient number, and that perhaps the organizations which might avail

themselves of this bureau were not aware of it, and in order to stimulate activity the larger civic clubs, luncheon clubs, garden clubs, etc., have been notified that speakers may be had from their local medical societies. Conceivably this could be quite a large job in some areas, and it is hoped that the members of the societies when requested to participate will give their cooperation to the local chairman.

This effort has received some editorial recognition in some of the daily newspapers of the state, and it appears to meet with a very favorable reception from those who are sympathetic with the objectives of Medicine.

It is hoped that the new officers of the county societies, who have perhaps not been aware too intimately of this project, will undertake to appoint local chairmen, and to notify Dr. J. I. Waring, 82 Rutledge Ave., Charleston, S. C., of these appointments.

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#### RED CROSS: GOOD THINGS HAPPEN

The appeal of the Red Cross is universal. It provides the means to put into action that ageless impulse in the human heart that leads people to help one another—to give, to teach, to guide. Through its efforts to relieve mankind's suffering from disasters, accidents, and disease, the Red Cross contributes to the welfare of every American family. Touching the lives of more Americans than any other non-governmental agency, the Red Cross provides:

- Life-giving blood for the ill and injured
- Assistance to servicemen, veterans, and their families
- Help for the disaster stricken
- Training in nursing, first aid, and water safety
- Opportunity for young people to learn good citizenship through service to others

March 1961 will be proclaimed Red Cross Month by the President of the United States. About 3,000 of the 3,700 Red Cross chapters will be campaigning for funds to provide Red Cross services. The remaining chapters will either be campaigning for part of their funds or, in the event they have already met their needs through federated campaigns, be conducting educational campaigns to acquaint their communities with ARC activities.

This past year the Red Cross was on the job

the world over—wherever people were in need or in trouble. It provided food, clothing, medicines, and building material to victims in the devastated Chilean earthquake area. It sent doctors, nurses, and physical therapists to Morocco to help care for nearly 10,000 victims of a crippling paralysis. Also in Morocco, it rushed aid to refugees from Agadir, destroyed by earthquakes, fires, and a tidal wave.

Here at home, the Red Cross carried on a relief program for the thousands who fell victim to capricious Hurricane Donna. It gave them food, shelter, and medical aid and helped repair and rebuild their homes. Hundreds of thousands were trained in the vital skills of home nursing, first aid, and water safety. And for the ill and injured, it provided the life-giving blood urgently needed for recovery.

Men and women in military service, veterans, and their families also benefited from the multi-services of the Red Cross. Wherever U. S. men and women in uniform are stationed, the Red Cross is there to assist with personal and family problems and scores of other

troubles that can arise when a person is separated from home and loved ones. The Red Cross is at work in Veterans Administration offices, assisting those now out of uniform obtain the benefits provided by the federal government. It also is on duty at veterans hospitals, as well as other hospitals throughout the nation.

The Red Cross knows neither geographical nor ideological barriers. It pierces the Bamboo Curtain to give food and health supplies to Americans held in China. It surmounted the frontiers of East Germany to arrange the release of American servicemen.

The Red Cross depends entirely upon voluntary contributions to maintain its many services. Every county in the nation is served by a Red Cross chapter, manned and operated by the people of the community. The work of the Red Cross is done by two million devoted volunteers—men, women, and young people who can attest to the fact that “good things happen when *you* help.”

#### SELECTIVE SERVICE MIGHT CONSIDER SPECIAL DOCTOR CALL

General Lewis B. Hershey, Director of National Selective Service issued a bulletin on January 13, 1961 to all State Selective Service Headquarters of interest to Doctors of this State as follows:—

“Not enough physicians are making applications for commissions to meet service requirements. If the present trend continues, a special call will be placed with the Selective Service system for the delivery of physicians.

Local Boards are requested to accomplish, no later than March 1, 1961, the physical examination of all physicians born after December 31st, 1931, who are in Class I-A or Class I-A-O and have not been examined, or who are classified in Class IV-F on the basis of an armed forces physical examination accomplished prior to their becoming physicians.

Local Boards are also requested to accomplish, no

later than March 1, 1961, the physical examination of all physicians who are in Class II-A and are serving internships. . . .”

This refers to Doctors who are liable under the regular draft. In case of a call, non-fathers will be called first, then fathers under 26, the over 26, fathers or non-fathers. The oldest will be called first.

This call, if made, will be under the regular draft act. However Doctors called under this act will be given an opportunity to secure a Commission.

This call will not be made if enough Doctors volunteer to meet the needs of the armed services.

This information is furnished so that those Doctors called up for physical examinations will know why they are being called.

Frank C. Owens, M. D.  
S. C. Chairman Medical Advisory Committee  
to Selective Service.



## MEDICAL COLLEGE CHANCELLOR HONORED

Dr. Kenneth M. Lynch, long-time president and now chancellor of the Medical College of South Carolina, was honored in Columbia, S. C. on January 4 at an "appreciation dinner" attended by more than 200 of South Carolina's medical, civil and political leaders. Governor Ernest F. Hollings, Dr. H. Rawling Pratt-Thomas, dean of the College's School of Medicine, and Dr. Thomas A. Pitts of Columbia, chairman of the Medical College's board of trustees paid tribute to Dr. Lynch's part in the expansion of the Medical College program.

Governor Hollings called Dr. Lynch's work "monumental" and noted that since 1944 about 20 million dollars have been invested by the Medical College on its campus. "It is expected," said the Governor, "that by the end of the next decade we will have a medical center with a face value of close to \$50 million with an intangible value too precious to be estimated." Governor Hollings also remarked about Dr. Lynch's part in working to obtain the Veterans Hospital proposed for Charleston. "It can now and should be revealed," the governor said, "that Dr. Lynch has been in negotiation with the Veterans Administration for the past several years to pave the way for this accomplishment."

Dr. Pitts traced Dr. Lynch's career from 1913, when he arrived at the Medical College as the youngest man ever to head a department of pathology in a medical school, until his retirement last year.

Dr. Lynch has taught more than half of the practicing physicians now active in South Carolina, Dr. Pitts said and added that more than 2,000 doctors "have marched into his classrooms."

Dr. Pratt-Thomas spoke of Dr. Lynch's achievements in the field of medicine and told of his non-medical interests as a sportsman and man of the out-of-doors.

In addition to the vocal tributes, Dr. Lynch also received a book containing letters of commendation from persons throughout the nation as well as the state, and an old English Sheffield bowl bearing this inscription:

"To Kenneth Merrill Lynch, M. D., chan-



KENNETH MERRILL LYNCH, M. D.

cellor, Medical College of South Carolina, in appreciation of his services to medicine and to humanity. Presented by his friends, Jan. 4, 1961."

Dr. Pratt-Thomas's address follows. (The Governor's speech will appear in the Alumni Bulletin of the Medical College.)

It is easy to talk about one's chief behind his back. It is not unduly difficult to talk to him face to face, particularly about someone else. It is apt to be a trifle disconcerting to talk about him to his face. I have been closely associated with Dr. Kenneth M. Lynch for more than twenty years in a professional capacity having to do with teaching, research, and diagnostic services. Seldom has the make-up of an institution become so closely identified with the personality of an individual. Kenneth M. Lynch and the Medical College of South Carolina over the last two decades have become virtually synonymous. He was Mr. Medical College. This came about due to the devotion of Dr. Lynch. He lived and breathed Medical College. This was true whether he was presiding in the "throne-room" of the Medical College Hospital, in his pink clapboard work-away shanty in Summer-ville, at his beach cottage, at national meetings, in the rotunda of the capital in Colum-

bia, or in the halls of the National Administration. It is true that *Odocoileus virginianus*, *Meleagris gallopavo* and *Camellia japonica* have furnished diversion and relaxation, but I am almost certain that his wild turkey gobblers know a thing or two about the political scene in South Carolina and probably by association with their keeper became more nervous than usual during the budget hearings and meetings of the general assembly. I am sure that on a deer stand all the conversation did not revolve about the number of mythical points on a buck's head but was equally divided between the deer's anatomy and the points in favor of this or that at the Medical College.

For those of us who have been privileged to know him during a period of time which now approaches a quarter of a century, this devotion and single-mindedness of interest and purpose has been an outstanding attribute. No less impressive to his colleagues has been his vision. He has been blessed with vision sufficiently synchronized to the times that dreams and plans have become reality. A man with vision who is too far ahead of his time is termed a "crack-pot". Backward glances are easily achieved by anyone and as the eye specialist says are always twenty-twenty. Forward glances may be viewed as either idiotic stares by one's contemporaries or as sensible projections of the necessities demanded by the future. Dr. Lynch achieved his accomplishments by possessing vision tempered by reality. In common parlance, he never projected himself into space but he definitely became air-borne.

Closely allied to effective vision in terms of results is the matter of timing. Kenneth M. Lynch might well have been a Swiss watchmaker in this realm of endeavor. A camera whose shutter sticks and doesn't open at the proper moment will never record that all important moment of decisive action. A gun that is trigger-happy and fires too soon will not bring down game any more than one whose trigger has to be yanked to make it go off. How often have I heard Dr. Lynch remark, "now don't let's rock the boat." It was equally understood although never expressed

that what he really meant was "don't rock the boat until the seas are favorable and then if necessary turn the damn craft over." When the opportunity knocked, the door was flung open wide if the home was adequately provendered and its residents properly prepared to see guests. If not, she was carefully notified of a return engagement under more propitious circumstances.

A man of vision in touch with the present and the future and fully cognizant of the proper time for action may still be thwarted if he lacks the knowhow and people-relationship necessary for success. Practitioners of medicine are constantly talking about physician-patient relationship. Dr. Lynch was constantly practicing people-relationship. He may share the view held universally by others that he is a highly competent pathologist. I would like to inform him at this time that he is also an extremely competent psychologist. It has been a standing joke among members of the Medical College staff returning from conferences with Dr. Lynch to hear them state "No, I didn't get what I wanted but he sure did make me feel good about it." I have seen the parents of flunked or failing medical students appear at Dr. Lynch's office mentally and physically equipped with everything short of actual firearms and retreat extolling the virtues of Dr. Lynch and vowing to try to put that no good son of theirs on the right track.

Master-of-men, perhaps, when the situation demanded, but worker-with-men by custom and temperament. It becomes apparent then that a man with vision attuned to the times and possessing those faculties of reason, cajolery, and forceful persuasion was necessary to introduce a new era in medical education and service in South Carolina. It is extremely doubtful; in fact, it is undoubtedly true that only such a man as Dr. Lynch would have been capable of overcoming divergent views, entrenched obstructionism, and uninformed apathy in order to move in a progressive and impressive fashion. The manner of growth in the educational research and service area of the Medical College is well typified by the Department of Pathology where my association and knowledge of Dr. Lynch has been the

closest. When I joined the department in 1940, I was intrigued by the creaking, clacking noises which emanated from Dr. Lynch's inner sanctum. These originated from an ancient typewriter; undoubtedly, a refugee from the Smithsonian Institute and none the less remarkable was the fact that it was operated by Dr. Lynch himself. Even more startling was the fact that it soon became obvious that I, too, was going to be launched into the secretarial field. Upon completion of my first autopsy and being eager to record my findings, I inquired of the one other doctor in the department other than Dr. Lynch as to who was going to transcribe my protocol. He stared me straight in the face and made no reply other than to point a finger at my chest and then at another typewriter not quite as ancient as the one that Dr. Lynch used himself. It was obvious that such must be the case because there were no clerk typists or secretaries in sight. There was obviously need for an expansion program! Fortunately, there were a few technicians and I did not have to perform the entire complex process of making the microscopic preparations in addition to the study of it through the microscope, making a diagnosis and writing the report as Dr. Lynch did in 1913. There is at present in the Department of Pathology the original furnishings of this department — a 3 by 2½ foot ornate little table which Dr. Lynch obtained from a second hand furniture store for \$1.50.

In the now massive shelves of permanently bound records of the Department of Pathology there stands a single little volume containing the report on the first pathological examination ever made at the Medical College of South Carolina and the first ever made in South Carolina, so far as is known. That report Number 1, dated September 25, 1913, was written and signed by Kenneth M. Lynch, M. D.

That first thin volume is numbered from 1 to 194, covering a period from September 25, 1913 to December 31, 1914, fifteen months. The last bound volumes of these pathological reports, for the year 1960 count 26 thick volumes. In 1913 during the first year of Dr. Lynch's tenure, 91 autopsies were performed

in the Department of Pathology. A steady increment has occurred so that in 1960, 600 were done including 25 during Christmas week and 7 on New Year's Day.

One of the prospects which brought him back after he had been away for a few years was promoted by the Duke Endowment. In its program of contributing to hospitals for improvement of their services an arrangement was made by which small hospitals which could not hope to procure or support a resident pathologist could secure that service in South Carolina at the Medical College with the resultant elevation of standards of patient care. Such pathological service is recognized as the gauge of quality of medical service in a hospital, and the controlling check upon unnecessary and unwarranted surgery. When nothing was being done in 1913 to a time when every hospital in the state is covered either by its own pathologist or still makes use of this important service is one of the near miracles of present-day medicine.

While anatomy, chemistry, microbiology, physiology and pharmacology are the basic sciences in medical education, pathology is the foundation of any understanding of disease processes. It provides the bridge from the basic sciences to clinical medicine, to the care of sick in practice, to the fields of diagnosis and treatment. As I told my medical class the other day, they all had to be pathologists of sorts, because if not they could never understand the ailments of patients and how to care for them. Dr. Lynch began with literally nothing. The first routine course was begun, as is usual, in the sophomore year; but, immediately he was asked by members of both the junior and senior classes to give them an unscheduled course. They were even willing to spend night hours at it, and so was he. So, in his first year here he did three years teaching.

Dr. Lynch has long been aware that the human mind is the most complex mechanism which may be mass produced by unskilled labor. Perhaps this never-ending source of supply partially accounts for his dedication to the teaching of medical students.

As a teacher Dr. Lynch was renowned for



his concise, logical and stimulating presentations, but probably even more than this his students realized he was a constant guardian of their welfare. He never lost sight of the fact that the students were the most important components of a medical college. This would not appear to be a particularly profound observation, but it is startling to discover how they may be overshadowed within the complexities of a modern day medical center.

A while ago I asked him to give a lecture to my class, and for the first time I heard a class at this institution applaud a faculty lecturer.

Altogether his teaching gained such national repute that twice the American Medical Association invited him to write articles on particulars of his course for publication in the Journal of that Association.

In the periodic reports of the national accreditation agencies on the rating of the School of Medicine, you might easily deduce that the Department of Pathology here was the pillar of support of the entire school; it was always rated with the best. More than once it was boldly stated that Dr. Lynch was doing an outstanding job under impossible conditions.

He had begun his researches at Pennsylvania; he has never closed them out. Although his administrative work as head of the institution reduced his research time considerably, and while he had to enlist the interest and help of assistants, even today he has several experimental investigations going.

From this work he has published over 100 articles and reports in scientific medical journals. It also led to invitations which caused him to write two books and to collaborate on others.

It has won him numerous honors, including awards, citations, official positions and honorary degrees. In line with it he is an active member of 23 or more scientific and medical associations, in most of which he served in high official position, having been president of three major societies in a single year. In a history of the Southern Medical Association published in 1956 his name appears seven times as "indelibly associated with contribu-

tions in the area of human disease", and he has been honored since that year with its Distinguished Service Award and Medal, its Diamond Jubilee Key and its Certificate of Appreciation. In fact, his name will be found in almost any index volumes of periodicals of reference books in his fields of scientific activity published in the last 45 years or so, as well as in practically every "Who's Who" known.

As recognition of his position in the world of scientific research it should be a matter of conscious pride to him as well as of great significance to his institution and South Carolina, including its medical profession, that he is now serving on two national scientific boards related to judgment, direction and support of scientific research in institutions throughout North America and scattered through other countries. He has the unique distinction of being the only member of either of these boards chosen from the South; he is chairman of one of them.

While his research has been quite diversified, in scanning the subjects of his publications there are certain groupings which might be made.

The first is in the subject of parasitic diseases, in which he is recorded as the first investigator ever to cultivate a certain one-celled animal parasite outside the body of its human host; the first to grow it in a test tube on artificial nutriment of his own devising, and thus to study its life history, and to experiment with it.

From his researches in this field, Dr. Lynch came into close acquaintance with scientists over the world. He was elected president of the American Society of Tropical Medicine, and he received many honors and awards. His book, a monograph on certain parasitic conditions, written at the invitation of one of our greatest publishing houses, remains an authoritative work in its field.

The second field of medicine in which he attained authority stature is one in which his researches here are now almost forgotten except in medical publications of permanence, and yet they played a leading role in the practical obliteration of a once prevalent disease

which crowded the wards of our hospitals with patients for whom little or nothing could then be done, and which caused great suffering and cost many lives and thousands upon thousands of dollars annually. It was one of these unmentionable diseases like syphilis, granuloma inguinale. It was generally not recognized as a specific disease in this country prior to the research work done here simultaneously but independently with that of Dr. Douglas Symmers at Bellevue Hospital in New York.

Dr. Lynch became interested in the matter, as a distressing bugbear in the wards of Roper Hospital. He traced down a report from South America, where it was said to respond to treatment with antimony. After determining the true nature of the disease by bacteriologic and pathologic examination, and finding no antimony product available for appropriate use, he made his own experimental solution from "tartar emetic", an antimony salt, and secured permission to treat these patients, who you may be sure other staff members were glad to have taken off their hands.

This was one of the earliest successful specific chemotherapeutic treatments done in this country.

He took a "Scientific Exhibit" to Boston, the first ever presented from this school before that monstrous organization, the American Medical Association and was nonplussed when he returned from reading his program paper to see a sign hung in his booth reading "GOLD MEDAL". He thought some facetious friend had hung it there because of the nature of his pictures. But it was real; he still has it, you may be sure, among a collection of others, the only ones ever won from here.

The third major subject of his researches which has brought recognition of Dr. Lynch as an authority in a special field will illustrate his versatility and his alertness to pick up a clue in his routine work and follow it through to uncover factors of disease-causing nature not previously known or understood.

Among the great industries of this country and throughout civilization, there are many procedures requiring the fractionation or the physical reconstitution of crude materials into finished products. These processes may expose

workers in the processing plants to harmful byproducts. Some of these substances are in the form of dust particles; some are gases and invisible. Air pollution may occur in many ways and while Dr. Lynch has become widely known in the subject as a whole, he is recognized as an authority on industrial dust diseases.

In one of our major industries, he was a pioneer investigator in determining the nature and the effects of a disease caused by breathing the contaminated air by workers in the mines and factories, and he has served over the country in advising the industry in safety control measures. As a result of studies by him and by other investigators over the country, a danger to the thousands of workers in this industry, formerly exposed to the development of a disabling and finally fatal disease, asbestosis has been brought under control. A hazard to the industry itself has been removed and incalculable losses in health, life, and money avoided.

In another similar industry of importance to this region, he was the first to report a description of the disease concerned and the application of the same type of safety measures has brought that hazard under control.

At the Medical College, Dr. Lynch was given the first money grant ever received there in support of medical research although he has never received any pay for research himself. He secured the means for the construction of the great building, soon to arise here, to provide quarters for the important program of medical research now going on.

Although the list of subjects of his numerous published papers exhibits a great versatility and covers much more area than can be touched upon here, there are some significant items which should be mentioned. For instance, his researches in pellagra, in leprosy, in filariasis — once prevalent in the Charleston area, as the only focus in this country; his report of the fatal effects of a drug product called "Elixir of Sulphanilimide" which, joined with simultaneous reports from other places, caused an emergency search and confiscation of all of this medicine, to prevent further deaths by its use.

Not because of his more recent research, but as a thread which runs through his entire career comes his real primary research and professional challenge — cancer. He says, "I don't know the cause of cancer, nor do I know of anyone who does". One of his personally conducted experimental researches, now in its 30th year of continuous devotion and the project which was awarded the first financial grant support ever received here, is in connection with cancer of the lung. Many of his published papers concern the question, or questions, of cancer. In fact, most of his diagnostic interest in the pathological examinations he has done during his entire professional career has been centered about the enigma of cancer.

Always an outdoorsman, he is still a hunter and a surf fisherman. Living in Summerville he has at his home there an establishment unique in the world, in natural history and wildlife study — a colony of the only pure strain, native wild turkey ever raised in close captivity, now in its twelfth year and as many generations. While this colony is so completely isolated, screened and padlocked that even members of his family have never seen these magnificent birds, he occasionally admits individuals who come from far away to see and hear about the experiment.

He wanted to find out why our Thanksgiving table turkey had to come from Mexico, all the way through Europe, why our colonist ancestors did not domesticate our native turkey. He wanted to know why game commission turkeys and birds for restocking need to be cross breeds, why the pure strain of the only native American pheasant has almost become extinct. He is studying their habits, their traits, their prospects of survival and return to their native woods. He is also experimenting with control of the dread disease of turkeys, "Black-

head", the hazard of commercial turkey raising. He hopes to write a book about them, telling the story that has never been recorded. I have eaten a few of these wild turkeys believing at the time that they were of original native stock. I have since suspected from conversations with him that they were derived from eggs and birds given him that proved to be "tainted" strains — I have the feeling that I have still to taste the real McCoy, for he ruthlessly weeded out all unpure strains, but jealously protected his aristocrats.

It is customary for many families to transport children, dogs, parakeets and other pets to vacation spots. Dr. Lynch is undoubtedly the only individual who ever took flocks of wild turkeys on vacation with him. I remember well the occasions when he loaned me his beach cottage outfitted with these birds and how I prepared salads for them from chopped "turkey weed" growing in the vicinity. There too, among the great pines, oaks, azaleas, and other shrubs and trees, he and Mrs. Lynch have raised by hand several thousand camellias in grounds which have become a show place of the Low Country. Here they experiment with seedlings grafting and cross-breeding.

Though this is only a brief synopsis and analysis of the career of a typical American of the pioneering type, it may give some explanation for his motivation, some insight into his personal traits, and shed light as to how and why his "Expansion Program" built the present-day Medical College of South Carolina to a foremost position as a modern health and medical educational, training, research and service center — of the story of Kenneth M. Lynch, Doctor of Medicine, Doctor of Science, Doctor of Laws, pathologist, medical teacher, medical school builder extraordinary, the most unforgettable and diversified personality I have ever met.



# News

## COLUMBIA MEDICAL SOCIETY JANUARY SCIENTIFIC MEETING

The Columbia Medical Society was honored to have as its guest speaker for the January Scientific Meeting Dr. Joseph P. Cain, President of the South Carolina Medical Association, who spoke on the subject "The South Carolina Medical Association and Its Outlook for the Sixties".

The program was carried to the Kershaw County Medical Society at Camden by telephone.

Dr. Cain traced the history of the South Carolina Medical Association since it was founded in 1848, when there were 721 doctors for the 700,000 population in South Carolina.

Emphasizing the strength and responsibility the county medical societies have in formulating the policies of organized medicine, he pointed out that the American Medical Association formulates its policies and receives its authority from the state organizations, and the state organizations from the county societies.

Points covered in Dr. Cain's talk included the following: (1) Medical Education (2) Civil Defense (3) Social problems, re-emphasizing the primary aim of the medical profession to give everyone in South Carolina the best possible medical care, both before and after age 65; (4) Pre-paid medical insurance as the answer to the so-called high cost of medical care; (5) Public Relations, and the physician's image as reflected in the eyes of the public. He emphasized that all the public relations programs of medical associations would not be effective unless the individual doctors measured up in the personal relationship with their patients, thereby creating a warm and sympathetic image of the profession. "The image of the physician is not a shadow, but the way he is reflected in the eyes of his fellow men."

Following his talk, Dr. Cain responded to questions from the floor.

Dr. E. K. Aycock, Columbia pediatrician, was the local speaker of the evening. The subject of his scientific presentation was "Current Uses of Gamma Globulin with Special Consideration of Hypo-gammaglobulinemia".

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Dr. Weston C. Cook was installed as President of the Society at a joint dinner meeting preceding the scientific program. Other officers for 1961 are: Dr. James T. Green, President-Elect; Dr. Joe E. Freed, Vice-President; Dr. Charles R. Sloan, Secretary; Dr. Waitus O. Tanner, Treasurer; Dr. P. F. LaBorde, Editor, *The Recorder*.

Dr. W. A. Hart, retiring president, was presented

with an appreciation plaque from the Society in recognition of his service to the community and to the medical profession. From the Woman's Auxiliary Dr. Hart received a scrapbook of the activities of his administration.

Two physicians of Columbia were honored for having served for 50 years as physicians in South Carolina. Gold pins were presented by Dr. Joseph P. Cain honoring Dr. Marion Wyman and Dr. T. M. DuBose. Dr. DuBose's was received posthumously. It was accepted by his son, Dr. Hugh H. DuBose. Dr. Wyman and Dr. DuBose were graduated together from the Medical College of South Carolina class of 1910.

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Following the joint dinner meeting, the two groups separated for their programs. Mrs. George W. Smith, Jr., State President of the Woman's Auxiliary, addressed the women on "Objectives of the National Auxiliary".

Officers of the Woman's Auxiliary are: Mrs. C. Tucker Weston, President; Mrs. R. C. Slocum, President-Elect; Mrs. P. F. LaBorde, Vice-President; Mrs. R. G. Latimer, Recording Secretary; Mrs. W. M. Barr, Corresponding Secretary; and Mrs. Penrod G. Hepfer, Treasurer.

## EYE CARE

A greatly expanded program of information to the public on the meaning and value of good eye care is planned for 1961 by the National Medical Foundation for Eye Care. The Foundation was organized in 1956 as a public educational agency for American ophthalmology, and most of its 3,000 members are Diplomates of the American Board of Ophthalmology.

The Foundation's public information program has several main features: 1) a series of monographs on major socio-economic and organizational problems confronting ophthalmology. These are widely distributed to editors, publicists and other "opinion makers"; 2) a series of popular pamphlets on eye care topics, of which nearly 3,000,000 copies have been distributed during the past four years largely through physicians' offices; 3) an informational and advisory service for popular magazine editors and science writers; and 4) periodic stories and educational material for medical journals, newspapers and radio-TV outlets.

Contributions to Easter Seals help finance a national research program seeking out clues to prevention and treatment of crippling conditions and rehabilitation of the physically handicapped.

## NEW MEDICAL BUILDING PLANNED IN ANDERSON

A medical office building of more than 6,000 square feet will be built at Greenville Street and Boulevard, in Anderson.

The building will provide offices for Dr. C. H. Young, Dr. J. R. Young, Dr. J. H. Young, Dr. Claud Perry and Dr. Charles Bailes, all of whom are members of a firm with offices now located in the Professional Building. Some space in the building will be available for rent to other doctors.

There will be 53 rooms in the building, which will measure 130 feet by 50 feet. It will face Greenville Street, but cars will enter the parking lot from Boulevard.

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## DR. W. T. GIBSON HONORED

Dr. William Thornwell Gibson of Batesburg was recently honored by an article in the *Twin City News* on the occasion of his 77th birthday. The article cited Dr. Gibson for his long and faithful service, stating: "We feel that your thousands of friends would be keenly interested in your life which has touched so many," and states that Dr. Gibson had delivered between 4,000 and 5,000 babies, "more than the population of Batesburg."

Dr. Gibson was born in Marion County, S. C. on a plantation between Centenary and Mullins. He came to Batesburg on March 10, 1910, driving in a horse and buggy. He has practiced for 50 years in his chosen community. He is a member of the Ridge Medical Association, the District Medical Association and honorary member of the South Carolina and American Medical Associations. One of Dr. Gibson's sons, Dr. Henry W. Gibson, followed in the footsteps of his father and is a general practitioner in Barnwell.

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## DR. ROSENFELD NEW HEALTH OFFICER IN DARLINGTON

Dr. Abraham P. Rosenfeld became full-time Health Officer in Darlington County effective December 2. He replaces Dr. O. A. Alexander, who resigned several months ago.

Dr. Rosenfeld is a native of New York. He received his medical degree from the Medical College of the University of Vermont and has been engaged in general practice in Darlington since 1938.

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Lee M. Keach, M. D. announces the opening of his office for the practice of general medicine at 526 Maybank Highway, Riverland Terrace, Charleston.

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Dr. Samuel Roscoe Moorhead of Anderson has been certified by the American Board of Pediatrics.

## DR. BARNEY TIMMONS NAMED CHIEF OF STAFF

Dr. Barney F. Timmons was elected chief of staff of Byerly Hospital at the annual meeting of the medical staff held in November. Dr. Kenneth W. Krueger was elected assistant chief of staff and Dr. E. S. Williams was elected staff secretary.

Dr. Timmons is a graduate of the University of South Carolina and received his degree in medicine from the Medical College of South Carolina in 1945.

He served his internship at Jersey City Medical Center in 1945-46 and then entered the Army Medical Corps with the rank of captain and saw war-time service in Korea during 1946-48.

He took residency training in diseases of the eye, ear, nose and throat at Duke University Medical Center in 1949-52 and was an instructor in 1953 in the department of ophthalmology at the Duke Medical School.

Dr. Timmons entered private practice in Hartsville in 1954, specializing in diseases of the eye, ear, nose and throat.

Dr. Timmons is a member of the South Carolina Medical Association, American Medical Association, Southern Medical Association, Hartsville Exchange Club, and he is an examiner for the Civil Aeronautics Administration.

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## CHEST PHYSICIANS ESTABLISH FUND TO ASSIST CUBAN MEMBERS

At the meeting of the Board of Regents of the American College of Chest Physicians held in Washington, D. C. on November 28, 1960, a resolution was adopted to establish a relief fund for Cuban members of the College who have been exiled temporarily from their country. The Board of Regents voted to contribute \$5,000 to launch the fund and contributions are being solicited from College members and others who are interested. The Cuban Chapter of the College was founded in 1940 and now has 74 members.

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Dr. Daniel L. Maguire, Jr. has announced the re-opening of his office for the practice of general surgery at 189 Calhoun Street, Charleston, S. C.

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## PICKENS COUNTY MEDICAL SOCIETY ELECTS OFFICERS

New officers of the Pickens County Medical Society were elected at the quarterly meeting in Pickens, headed by Dr. John M. Harden of Pickens as president.

Others named were: Dr. W. J. Goudelock of Easley, vice-president; and Dr. J. K. Holcombe of Liberty, secretary-treasurer. Dr. J. H. Cutchin of Easley and Dr. Sydney A. Garrett of Pickens were chosen delegates to the State Medical Convention, and Dr. J. A. White of Easley, alternate. Dr. William Hilton, Jr. of Liberty, retiring president, was named to the Board of Censors.

### DR. J. L. SANDERS RETIRES

Dr. J. L. Sanders has retired from the practice of medicine, the Greenville County Medical Society has announced.

His retirement was effective December 1.

Dr. Sanders began his practice in Greenville in 1922, following his training at the Medical College of South Carolina, the New York Eye and Ear Hospital and Cornell University, the University of Minnesota, and the Mayo Clinic.

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### SPARTANBURG MEDICAL SOCIETY ELECTS HAMMOND

Dr. Wardlaw Hammond of Spartanburg has been elected president of the Spartanburg County Medical Society.

He succeeds Dr. Edwin Cochran of Spartanburg. Other officers are Dr. Charles Hanna, president elect for 1962; Dr. Vernon Jeffords, secretary; and Dr. Sam Fleming, treasurer.

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### DR. GAZES TAKES MEDICAL COLLEGE POST

Authorities at the Medical College of South Carolina announce that Dr. Peter C. Gazes has become associated with the full-time faculty, specializing in cardiovascular diseases. He will discontinue private practice.

Dr. Gazes, a native of St. Matthews, is a graduate of the Medical College of South Carolina and has been associated with the college on a part-time status in both the departments of Pharmacology and Medicine since completion of his specialty training in cardiology at Philadelphia General Hospital in 1949.

He is certified by American Board of Internal Medicine and the American Board of Cardiology.

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C. Ford Rivers, Jr., M. D., of Charleston, has announced the limitation of his practice to cardiovascular diseases.

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### NEW MARION COUNTY OFFICERS

At a recent meeting of the Marion County Medical Society, the following new officers were elected:

President, Dr. Charles R. Elvington, Nichols.

President-Elect, Dr. J. B. Berry, Marion.

Vice-President, Dr. Ira Barth, Marion.

Secretary-Treasurer, Dr. M. Edward Rice, Mullins.

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### CHARLESTON COUNTY OFFICERS ELECTED

The following officers were elected at the meeting of the Charleston County Medical Society on November 8.

President, Dr. William M. McCord

Vice President, Dr. Joseph I. Waring

Secretary-Treasurer, Dr. R. Maxwell Anderson

### DR. BANOV NOMINATED FOR LASKER AWARD IN PUBLIC HEALTH

The name of Dr. Leon Banov, Director of the Charleston County Health Department, has been submitted to the American Public Health Association for consideration for the Lasker Award in Public Health for 1961.

His nomination is based on the following achievements. In 1919 he secured passage of an ordinance which enabled Charleston to be the first city in the world to require pasteurization of all market milk.

He was primarily responsible for construction of Pinehaven, Charleston County's Sanatorium for tuberculosis patients.

Through pioneering work he has brought the Charleston metropolitan area of some 200,000 population into the forefront of communities of America in public health.

In the year he became County Health Officer, 1920, there were 201 reported cases of smallpox in Charleston. Ten years later only one case was reported. None has been reported in the last 30 years.

In 1920 the infant mortality rate in the city of Charleston was 87.7 per 1,000 live births for whites and 328.7 for non-whites. In 1956 the comparable rates were 27.7 for whites and 50.3 for non-whites.

In 1920 the maternal mortality rate was 3.3 per 1,000 live births for whites and 17.7 for non-whites. In 1956 these rates were 0.4 for whites and 0.0 for non-whites.

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### NUTRITION SYMPOSIUM HELD AT MEDICAL COLLEGE

"Nutrition Advances Affecting Community and Individual Health" was the theme of the Nutrition Symposium held January 24-25 in the Baruch Auditorium of the Medical College in Charleston.

John Youmans, M. D., Director, Division of Scientific Activities, American Medical Association, was one of the prominent speakers. Phillip White, M. D., also of the American Medical Association, spoke on food contaminants and the influences of food processing on health. Hazel Stiebling, Ph. D., Chief, Institute of Home Economics and Human Nutrition also contributed to the program.

Visits to the research laboratories of the Medical College were an interesting feature. The Symposium was sponsored by the South Carolina State Nutrition Committee in cooperation with the Medical College.

The Program Committee was composed of Vince Moseley, M. D., Dean of the Medical College; Hilla Sheriff, M. D., Director of the Division of Maternal and Child Health, State Board of Health; Janie McDill, Extension Service Nutritionist; and Margaret Freeman, Health Department Dietitian.



## POLIO AND THE NATIONAL FOUNDATION

The state of South Carolina has been the principal beneficiary in the allocation of March of Dimes funds raised in the state over the past 23 years, it was disclosed recently in a financial summary prepared by The National Foundation.

More than 57 cents of every dollar from South Carolina's March of Dimes has been put to use in aiding the state's disease victims. Of the remaining 43 per cent accruing to the national headquarters, a considerable amount also has come back to South Carolina in shipments of polio vaccine and gamma globulin and in other nationwide services conducted by The National Foundation.

The summary covers the period since the first March of Dimes was held in January, 1938, and compares the net total of funds raised in the state with amounts made available to South Carolina through September 30, 1960.

In this period, South Carolina chapters of the March of Dimes organization raised a net total of \$4,404,984.62 at an average fund-raising cost of less than 8 per cent. Of this amount, \$2,500,861.55 has been available to the county chapters in carrying out their extensive patient aid programs, including advances of \$719,150.90 from the national office to meet local emergency situations.

Over and above the 57 per cent used by county chapters in the state, The National Foundation has financed within the state projects such as the historic field trials which proved the effectiveness of the Salk vaccine, epidemiological studies and scholarship or fellowship grants to South Carolina residents. National headquarters' expenditures for the vaccine trials in South Carolina amounted to \$28,536.11. In addition, the national office has sent into South Carolina \$96,255.69 worth of Salk vaccine in support of its polio prevention programs.

The scientific research program which developed polio vaccines was financed by the national office's share of contributions.

Two years ago, the National Foundation for Infantile Paralysis changed its name to The National Foundation in expanding its areas of interest beyond polio to include certain birth defects and arthritis, using the scientific knowledge and experience gained in the fight against polio.

The New March of Dimes took place throughout the month of January.

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### THE MONTH IN WASHINGTON

Spokesmen for the medical profession at the White House Conference on Aging supported the Kerr-Mills voluntary program for health care of elderly persons as an efficient, economical way to furnish assistance to those who need help.

Leading physician delegates to the Conference also

continued vigorous opposition to the Social Security approach espoused by organized labor.

Continuing their all-out campaign for the Social Security approach, labor union leaders used the Conference as a forum for further attacks on the medical profession.

Dr. J. Lafe Ludwig of Los Angeles, Chairman of the American Medical Association Council on Medical Service told a pre-Conference meeting of the physician delegates that it would be a "national tragedy—unfair to old and young alike—if the Kerr-Mills law should be shelved for a Social Security plan for medical care of the aged.

"Federal medicine would mean red tape, bureaucratic control, and high costs," Dr. Ludwig said. "Most important of all, it would mean inferior medical care for the people whom we are trying to help."

Describing the Kerr-Mills law as a "historic milestone," Dr. Ludwig said the "overwhelming majority" of the nation's physicians believe it is "an excellent law which can and will work and deserves every opportunity to do so."

Dr. Leonard W. Larson of Bismarck, N. D., president-elect of the A.M.A., told the Conference's Health and Medical Care Section that more attention must be given to keeping older persons healthy. He was chairman of the section.

"We spend millions of dollars and hours developing sound, well-based programs for care of the sick, but at the same time we virtually ignore the vast opportunities for preservation and promotion of health," Dr. Larson said.

"We must do more than react to the minority of older persons who are ill—we must act for the great majority who are well."

In a statement issued in Chicago, Dr. E. Vincent Askey of Los Angeles, President of A.M.A., branded as false an allegation that the White House Conference has been "captured" by organized medicine, private insurance and business interests. Dr. Askey specifically referred to such a charge made by Prof. Wilbur J. Cohen of the University of Michigan but the A.M.A. president's statement applied to similar charges made by representatives of organized labor.

Dr. Askey implied that, "if anyone has a legitimate complaint regarding the choice of personnel directing the activities" of the key section on income maintenance, it was opponents of the Social Security approach.

Dr. Ludwig also answered organized labor's attacks on the A.M.A. at the Conference. Dr. Ludwig accused George Meany, president of the AFL-CIO, of "attempting to undermine" the Conference to "further his own partisan interests."

"Meany obviously is prepared to go to any extreme to impugn the motives of those who disagree with him," Dr. Ludwig said. "Delegates to this conference representing medicine and many other groups came here in a spirit of cooperation determined to take realistic action to help the elder citizens of this country.

"Meany, through his campaign of smear and hostility, is making this difficult, if not impossible."

Dr. Ludwig said that some labor leaders "obviously are more interested in saddling the people of this country with a system of socialized medicine" than he is in "helping those older people who really need help."

"Meany and such of his cohorts as Sen. Pat McNamara (D., Mich.) appear to be doing their utmost to create so much confusion that recommendations of the State Conference on Aging will be forgotten," Dr. Ludwig said.

"Of the 30 states making specific recommendations regarding financing of medical care for the aged, only 10 favored the Social Security tax."

President Eisenhower urged the 2,700 delegates to the Conference to reconcile their differing views and agree on a sound program. He told the delegates it was their responsibility to provide "some kind of guidance for Congress to use in its future deliberations."

President John F. Kennedy declined an invitation to address the Conference as President-elect. He and Congressional Democratic leaders decided weeks before the Conference to make medical care for the aged under Social Security an Administration priority bill for early submission to Congress.

But some key Democrats in Congress announced they would not go along with President Kennedy on the issue. Sen. Robert S. Kerr (D., Okla.), co-author of the medical-care-for-the-aged program approved by Congress last year, said it should be financed by a general tax—"not a limited tax like Social Security."

Similar opposition to the Social Security approach was expressed by Sen. John J. Sparkman (D., Ala.). Chairman Harry F. Byrd (D., Va.) of the Senate Finance Committee earlier had said he was convinced that providing medical care for the aged under Social Security would lead to socialized medicine and possibly bankrupt the Social Security trust fund.

Despite the Kennedy Administration's espousal of the Social Security plan, the A.M.A. pledged its continued cooperation to the Department of Health, Education and Welfare on other health programs.

A group of A.M.A. officials headed by Dr. Askey told the news H. E. W. secretary, former Gov. Abraham Ribicoff of Connecticut, at a pre-inaugural conference that the Association "pledges its continued cooperation to H. E. W. to work for the best medical care for the nation." The A.M.A. "has always had a deep sense of responsibility for the health needs of the people," Dr. Askey said.

The A.M.A. officials also advised Ribicoff that they would help implement the Kerr-Mills law in any way possible.

More than 1,400 Easter Seal clinics, treatment centers, rehabilitation centers, and programs of care and treatment help crippled children by teaching them to walk, talk and live like other children. You can join the fight against crippling by supporting Easter Seals.



*Eight-year-old twin sisters, Patricia (left) and Paula Webber of Sumter, South Carolina, share honors as 1961 National Easter Seal Twins for the National Society for Crippled Children and Adults. Paula, born with a crippling handicap, has received care and treatment from Easter Seal Centers throughout the U. S. wherever her father, Air Force Captain Robert F. Webber, has been stationed. It is the first time twins have been picked to represent the nation's crippled children in the annual appeal for Easter Seal funds to help finance rehabilitation services. The 1961 Easter Seal campaign opens March 2 and continues through April 2, Easter Sunday.*

## 9 NEW DOCTORS LICENSED

The State Board of Medical Examiners of South Carolina has announced that nine persons passed examinations given last month and have been licensed.

The new physicians are:

Drs. Harold D. Belk of Pageland; Karl Doskocil of Danville, Ky.; John C. Dunlap of Rock Hill; Lawrence A. Heavrin of Charleston; Samuel V. Johnson of Manning; Marion B. Kennedy, Jr. of Orangeburg; John P. Matthews, Jr. of Lake City; Count Pulaski, Jr. of Hampton; and John H. Riley, II of Columbia.

(Continued from page 68)

**CLINICS IN ELECTROCARDIOGRAPHY.** By Dale Groom, M. D., Pp. 152. Charles C. Thomas, Publisher, Springfield, Ill., 1960. Price \$8.00.

Dr. Groom's book is in essence a compilation of a series of articles which have been appearing in the *Journal of the South Carolina Medical Association* for the past four years. It is an interesting and very readable book, which according to the author has been designed "for busy clinicians and students".

Actually it covers more than straight-forward electrocardiogram interpretation. Each short chapter includes a case history, the illustrative electrocardiogram with the author's interpretation, a general discussion of the mechanism of the changes in similar electrocardiograms, and oftentimes necropsy and operative findings. All of the common and several of the rare disease states associated with electrocardiographic

abnormalities are covered. In the chapter on hypokalemia several causes for this condition are listed, but I was a little surprised to note the absence of the use of diuretics as an etiologic factor. It is noted, however, that this is brought out in a later chapter on paroxysmal atrial tachycardia with block. In this same chapter, page 112, "presystolic attenuation" should read "presystolic accentuation". On page 78, line 18, "virture" should read "virtue".

It should be emphasized that this book must be supplemented by one of the several books on electrocardiography already in print. It does not fill a "long felt need", but it is sufficiently interesting to stimulate the average practitioner to study other more comprehensive texts.

R. C. Smith, M. D.

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## Announcements

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### **A Symposium on "THYROID DISEASES — DIAGNOSIS & TREATMENT"**

One of the 1960-61 Circuit Courses of the Department of Postgraduate Education of the Medical College of South Carolina

AT: Marion, South Carolina (Marion County Memorial Hospital, 1108 North Main Street)

February 28, 1961      6:00 - 10:00 P. M.

#### **SCHEDULE:**

Symposium begins at 6:00 P. M. sharp

Refreshments and dinner 7:30 to 8:30 P. M.

Discussion 8:30 to 10:00 P. M.

#### **FACULTY:**

Dr. John Buse, Assistant Professor of Medicine

Dr. Maria Buse, Instructor in Chemistry

Dr. Randolph Bradham, Assistant Professor of Surgery

Dr. Dale Groom, Assistant Professor of Medicine,  
Moderator

Approved for 3½ hours credit, Category I, by the Academy of General Practice.

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#### **MEDICAL COLLEGE OF GEORGIA**

Two post-graduate courses are planned for February and March of 1961 at the Medical College of Georgia. Featured faculty will include Dr. Edgar A. Hines, Jr. vascular disease authority from the Mayo Clinic and Dr. Buford Word, Professor of Gynecology from the Medical College of Alabama.

"Management of Your Patient with Vascular Dis-

case" is scheduled for February 28, March 1, 2, 1961 and "Gynecology in General Practice" will be held March 21, 22, 23, 1961. The featured speakers will be supplemented by members of the faculty of the Medical College of Georgia.

Each course is acceptable for 18 hours of credit by the American Academy of General Practice. Registration fee is \$50.00 for each session. Application may be made by contacting Dr. Claude-Starr Wright, Director, Department of Continuing Education, Medical College of Georgia.

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The Gill Memorial Eye, Ear and Throat Hospital will hold its Thirty-Fourth Spring Congress in Ophthalmology and Otolaryngology and Allied Specialties, April 3 through April 8, 1961. There will be twenty guest speakers and fifty lectures.

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The Southeastern Chapter of The Society of Nuclear Medicine will hold its 2nd annual meeting in Atlanta, Georgia on March 10 and 11, 1961 in the auditorium of The Academy of Medicine.

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The West Virginia Academy of Ophthalmology and Otolaryngology will hold its annual meeting at the Greenbrier Hotel, White Sulphur Springs, West Virginia on April 6th, 7th, and 8th of 1961.

For additional information please contact the secretary, Dr. Worthy W. McKinney, 109 East Main Street, Beckley, West Virginia.





## does the bowel take kindly to no-bulk diets?

The bowel, designed to operate best under the stimulus of a bolus of waste, is seldom at rest under normal conditions. But the new bulkless liquid diets which have taken the country by storm, although they may be a useful road to weight loss, may also lead to constipation or bowel irregularities.

Metamucil adds a soft, bland bulk to the bowel contents to stimulate normal peristalsis and also retain water within the stools to keep them soft and easy to pass. Thus Metamucil, with an adequate water intake, will avert or correct constipation in the dieting patient. Metamucil also promotes regularity through "smoothage" in all types of constipation.

SEARLE

# Metamucil<sup>®</sup>

*brand of psyllium hydrophilic mucilloid*

Available as Metamucil powder in 4, 8 and 16 oz. cans, or as the new lemon-flavored Instant Mix Metamucil in cartons of 16 or 30 measured-dose packets.

The New Orleans Graduate Medical Assembly announces its twenty-fourth annual meeting to be held March 6-9, 1961. The program is acceptable for a maximum of 27½ hours, Category I postgraduate education by the American Academy of General Practice.

Information may be obtained from:

The New Orleans Graduate Medical Assembly  
1430 Tulane Avenue  
New Orleans 12, La.

The Southeastern Surgical Congress will hold its twenty-ninth annual assembly March 6-9, 1961 at the Deauville Hotel in Miami Beach, Florida.

For further information write to:

A. H. Letton, M. D., Secretary-Director  
The Southeastern Surgical Congress  
340 Boulevard, N. E.  
Atlanta 12, Ga.

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**THE MEDICAL COLLEGE OF  
SOUTH CAROLINA  
AND  
THE MEDICAL COLLEGE ALUMNI  
ASSOCIATION  
Announce**

A Post-Graduate Seminar — With Round-Table  
Discussions on Urinary Calculi, Metabolic and Clinical Aspects, A Regional Problem.

The Francis Marion Hotel  
Charleston, South Carolina

Thursday, February 23, 1961

**MORNING SESSION — Gold Room**

Moderator: George Durst, M. D., Professor of General Practice, Medical College of South Carolina

10:00 Urinary Factors in Stone Formation  
William Boyce, M. D.  
Professor of Urology, The Bowman Gray School of Medicine

10:30 Metabolic Factors  
Philip Henneman, M. D.  
Associate Professor of Medicine, Seton Hall University Medical School

11:00 Recess — Coffee

11:15 Role of Infection  
Ellard Yow, M. D.  
Professor of Medicine Baylor University College of Medicine

12:00 Luncheon for physicians and wives —  
Colonial Room  
Chairman: Dale Groom, M. D.  
Assistant Professor of Medicine, Medical College of South Carolina

**AFTERNOON ROUND-TABLE DISCUSSIONS**

Urinary Factors in Stone Formation

William H. Boyce, M. D.

1:30—Jessamine Room

2:30—Belle Isle Room

3:30—Recess

3:45—Charleston Harbor Room

Moderator:

W. E. Brooks, M. D.

Assistant Professor of Urology,  
Medical College of S. C.

Metabolic Factors

Philip H. Henneman, M. D.

1:30—Belle Isle Room

2:30—Charleston Harbor Room

3:30—Recess

3:45—Jessamine Room

Moderator:

Haskell S. Ellison, M. D.

Associate in Medicine, Medical College of S. C.

Role of Infection

Ellard M. Yow, M. D.

1:30—Charleston Harbor Room

2:30—Jessamine Room

3:30—Recess

3:45—Belle Isle Room

Moderator:

Cheves McC. Smythe, M. D.

Associate Professor of Medicine,

Medical College of S. C.

5:00 - 6:00 Reception—Gold Room

Wives of physicians are welcome and encouraged to attend.

**ALL PHYSICIANS ARE INVITED TO ATTEND.**

No fee is required for attendance at scientific sessions, luncheon or reception.

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**12th ANNUAL SCIENTIFIC SESSION  
presented by  
THE SOUTH CAROLINA HEART  
ASSOCIATION**

Greenville, South Carolina

March 31 - April 1, 1961

**GUEST LECTURERS WILL INCLUDE:**

E. Stanley Crawford, M. D.

Baylor University

College of Medicine

Texas Medical Center

W. Proctor Harvey, M. D.

Associate Professor of Medicine

Chief Division of Cardiology

Georgetown University Hospital

Jack D. Myers, M. D.

Professor of Medicine

Chairman, Department of Medicine

University of Pittsburgh

Jeremiah Stamler, M. D.

Director, Heart Disease

Control Program

Chicago Board of Health

J. Scott Butterworth, M. D.

Associate Professor of Medicine

New York University Post-Graduate

Medical School

President-Elect American Heart Association

Special Activities Planned For The Ladies!

# The Journal of the South Carolina Medical Association

VOLUME 57

March, 1961

NUMBER 3

## BASIC PSYCHOTHERAPY\*

KENNETH E. APPEL, M. D.

*Professor and Chairman, Department of Psychiatry,  
School of Medicine, University of Pennsylvania*

Psychiatry has had a long, rough, devious road both in theory and practice, from Hippocrates to Percival Bailey, the distinguished neurologist, and his academic lecture before the American Psychiatric Association several years ago with its penetrating critique of psychoanalysis; from Alcmaeon to Magoun, from Celsus to Rush, from Vives to Weyer to Freud and Jung. It is a long way from Leviticus where "a man . . . that hath a familiar spirit, or that is a wizard, shall surely be put to death"—a long way to Monte Casino. Plato wrote "if any one is insane . . . let the relatives . . . watch over him . . . in the best manner they know of; and if they are negligent, let them pay a fine."

The ways of treating aberrant and troublesome behaviour have been many—authoritative, directive, bullying, shaming, cruelty, physical shock, chemical, or social and environmental. Treatment procedures have varied according to temperament, culture, propinquity, therapeutic zeal, hunch, experiment and scientific advance. The advent of tranquilizers, ataraxics or anti-depressants does not relieve the patient, family and doctor from therapeutic management. Understanding of motivation and the principles of modifying behavior become more necessary than ever for the physicians. *Human behavior is more than a physico-chemical system.* The permanent modification of exaggerated, tangential, aberrant behavior requires more than drugs.

Neurosis, psychosis and psychosomatic conditions are states of ineffective function of the individual. Human behavior is more than a physical-chemical system. Many factors contribute to the effective or ineffective functioning of the body and psychology of the individual. In ineffective functioning is involved disappointment, dissatisfaction, fear, anger, guilt, distrust and depression. Many moving forces or motivations are at cross purposes or in conflict. Basic motivations or drives should be understood by both patient and doctor. Therapy that is rational, etiologic and dynamic, and not just palliative and sympathetic can be developed. Psychotherapy is an experience, a collaborative experience and search by doctor and patient, not merely an intellectual experience or discussion, nor moral suasion.

Many factors contribute to the effective functioning of the body and psychology of the individual. When there is ineffective functioning there is disappointment, dissatisfaction, frustration and there may be excessive anger, fear, guilt, distrust, depression. Many moving forces or motivations are at cross purposes and conflicts. Patients are often unaware of their basic motivations or drives. These should be guided and understood (where possible) in therapy that is rational, etiological and dynamic and which is not just palliative and symptomatic.

Effective psychotherapy, however, involves frequently more than understanding and insight. It involves goals, levels of aspiration, in-

\* Address delivered at the Annual Meeting of the South Carolina Medical Association, Myrtle Beach, South Carolina, May 19, 1960.



volvement and participation, tapping of the urges toward growth, self-maintenance, self-enhancement—eros, libido, *elan-vital* (Bergson) in their broadest implications. Therapy is not just a development of insight and retrospective reconstruction of the stages of the development (etiology) of neurosis and psychosis. This is a fundamental error in most modern theories of therapy including Freudian psychoanalysis. Understanding, knowledge, insight alone do not cure. Many “cures” take place without insight and understanding; in electroshock, insulin treatment, the use of ataraxics and even in psychoanalysis. There must be emotional involvement, on the part of the patient, a peculiar combination of eros and aggression. Helped by the ferment-like action of the therapist, *explorations* take place in growth, in capacities, in possible resolutions of difficulties. Buber, the great theologian of Judaism, in his existential formulation of the I and Thou, instead of I and It made an important contribution to modern psychotherapy.

Physicians and surgeons in the future will be called on to do more psychotherapy than ever. Various methods of psychotherapy are available to the general practitioner: ventilation psychotherapy in repeated, unhurried interviews; supportive psychotherapy based on facts of physical examination and implemented by physiotherapy and hydrotherapy; guidance psychotherapy including occupational and recreational suggestions; explanatory psychotherapy; and dynamic growth therapy. In many cases it is possible to achieve solid recovery without insight when enough time is allowed for the readjustment of the instinctive and the moral super-ego forces of the patient.

Various methods of psychotherapy are available to the practitioner — well outlined in the following tables from Dr. H. Yaskin.

Psychoanalysis and some of the other methods are reserved for the specialists. However, psychoanalytic theories and practice have great influence on standard psychotherapy today. All methods can be used appropriately at different times with the same patient or with different patients. A multifactorial approach is more often than not indicated—often including the use of drugs. Experience enables

TABLE 1	
METHODS OF PSYCHOTHERAPY	
(H. Yaskin, M. D.)	
I. METHODS FOR THE GENERAL PRACTITIONER	(Symptomatic Psychotherapy)
A. AERATION OR VENTILATION PSYCHOTHERAPY	
1.	By means of the history
2.	By means of repeated, unhurried interviews
3.	Opportunity for confession and life history discussion
B. SUPPORTIVE PSYCHOTHERAPY	
1.	By means of physical examination
2.	Judicious reassurance
3.	Establishment of rapport and opportunity for healthy identifications
4.	Suggestion and giving of illuminating information
5.	Medicinal and physical treatment including physio- and hydro-therapy

TABLE 2	
METHODS OF PSYCHOTHERAPY	
(H. Yaskin, M. D.)	
I. METHODS FOR THE GENERAL PRACTITIONER	(Symptomatic Psychotherapy)
C. MANIPULATIVE PSYCHOTHERAPY OR ADJUNCTIVE PROCEDURES	
1.	Occupational therapy
2.	Development of hobbies
3.	Establishment of daily routine
4.	Diversion and entertainment
5.	Vocational guidance
6.	Changing environmental attitudes
D. EXPLANATORY PSYCHOTHERAPY	
1.	Desensitization
2.	Persuasion and re-education
3.	Suggestion, direct or implied
E. DYNAMIC GROWTH THERAPY (Appel)	

one to select a number of these procedures that seem possible and helpful at a given time. There are dangers in authoritarian direction except in severest conditions, where it is certainly indicated. It may arouse antagonism, uncooperativeness or unwholesome dependency. Suggestions of alternatives for decision and action, for the patient to select, may stimulate a patient's initiative, resourcefulness and independence; but assurances which are contrary to fact may cause distrust of the physician and work toward his diminished effectiveness or downfall in serious conditions.

Psychoanalysis has been largely incorporated into general psychiatry, as is shown in Table 3.

TABLE 3  
PSYCHOANALYSIS IN PSYCHIATRY

Unconscious  
Repression — Resistance  
Dissociation  
Defense Mechanisms  
Transferences  
Abreaction  
Analysis  
Insight

-----  
Complexes—Oedipus  
Castration  
Infantile Impulses  
Fantasies

The concepts above the line have been largely accepted by general psychiatry. The exceptions are the use of the couch, the depth of analysis, the significance of the oedipus and castration complexes, and the interpretation of dreams, fantasies and infantile impulses.

Table 4 shows the principles of psychoanalytic therapy, and the various aspects of it.

TABLE 4  
PSYCHOANALYTIC THERAPY  
RELATIONSHIP WITH THERAPIST:

Confidence, support, submission,  
distrust, antagonism, receptive,  
permissive

FEELINGS:

Intense, exaggerated, distorted,  
inappropriate, displaced, habitual

ABREACTION — Ventilation — Express feelings

TRANSFERENCE — Displacement

-----  
FREE ASSOCIATION

INTELLECTUAL ANALYSIS — Interpretation  
Dreams —  
Fantasies

Psychoanalysis has influenced psychotherapy as seen in this chart. Contemporary psychotherapy operates to a large extent on the concepts of psychoanalysis down to the line indicated in the Table. Below this, free association, analysis and the interpretation of dreams and fantasies are not employed in psychotherapy with anything like the detail and consistency as in psychoanalysis. A definition of psychotherapy that has been useful is the following: helping people handle their feelings, motivations, and behavior more effec-

tively. This indicates the broad nature of psychotherapy; it is not limited to words, planned rational discussions, reasoning or argument. People can often influence others more effectively by what they do, their manner and attitude than what they say. What is left unsaid is sometimes more important in human relations and in treating emotionally sick people than what is said. It is a great art to know when not to voice the truth. Dr. Samuel Crothers said that the ability to know what people do not want to hear about themselves and not to say it is a good definition of tact.

Adolph Meyer at Baltimore and Freud at Vienna looked upon the majority of nervous and mental conditions, of neurosis and psychosis, as the distortion of developmental processes, as reactions to experience and situations rather than as the result of heredity and constitution. Reactions to people and circumstances during growth produce predisposing tendencies or habits. Table 5 shows the normal process of growth into effectiveness, satisfaction and health.

TABLE 5

1. Growth-----	Effectiveness
	Problem Solving
	Satisfaction
	Health

Growth is an expanding, outgoing, and organizing series of processes or manifestations of the organism. Freud used the words libido,

TABLE 6

2. Growth----	Interferences-----	Fear-anxiety
	Blocks	Frustration
	Distortions	Anger-hostility
	by	Guilt
	Circumstances	Illness
	Illness	
	Operation	
	Accidents	
	-----	
	Frustration	
	Neglect	
	Rejection	
	Domination	
	Dependency—over-protection, over	
	anxiety	
	Experience	
	Constitution	
	Heredity	

sex, love, much of which is indicated by the word growth. There is something creative about all this.

Table 6 indicates the various blocks in the normal process of growth. They produce fear, anxiety, anger, hostility, guilt, ineffectiveness, suffering, illness.

The interferences may be many, the customary runs of illness, misfortune, catastrophe, financial or personal, death, or they may be the more psychological blocks indicated in Table 6 below the dotted line. One sees here many factors entering into the formation of habits, inclinations, predispositions, aversions, temperament and expectations. One's expectations are tremendously important, whether conscious or unconscious, in the development of health or illness. The degree of responsibility that one can attribute to an individual varies greatly from time to time. This indicates some of the reasons why logic and will power have their limitations in dealing with strong, pre-rational forces and dispositions.

Anxiety is buffered by the various defense mechanisms. Intense expressions of these defense mechanisms appear in illness—the manic overactivity of extroversion; the depression of introspection; the suspiciousness of projection; the physiological disturbances of the conversion of emotional tensions into bodily reactions; the antithetical reactions of the meticulous, obsessive perfectionist; the regression of the extreme schizophrenic.

Psychiatry deals with personal and social stresses, whether in the past or present — the past being predisposing, and the present being precipitating. Experience — handicapping, frustrating, disturbing — is the source of the ineffective direction of energies, and the associated feelings of frustration, disappointment and depression. Personal, social and emotional experience is etiological, in the present state of knowledge, more often than such things as infection, trauma, toxic agents, deterioration or tumor. The stresses of experience can be injurious (castrating) in a predisposing or in a precipitating way. Psychotherapy is a counteracting or corrective experience. It is experience and practice, prospecting and searching, not just discussion, exhortation,

reasoning or the handing out of correct ideas to the patient.

A patient in his early thirties complained of dizziness, palpitation, diarrhoea and weakness; there were many pains in various parts of his body; there was indigestion and nausea. Many doctors said that he had colitis. There were many mood changes but chiefly those of discouragement, depression and anxiety; there was a great deal of indecision, puzzlement and at times confusion. In a former era of diagnosis one would have called his condition neurasthenia. Etiologically it turned out that the many pressures, involved in his mother's disappointment in the attainments of her husband, worked on her son, the patient, to compensate for her husband's deficiencies in her eyes. The patient was not only a son but sort of a husband-surrogate. Direction, supervision, over-concern over-stimulated this patient as a child and man. He was too dependent on his mother—really identified with her in many ways. This developed a psychologically effeminate, passive set of habits, although physically he appeared quite masculine. These guide lines of his mother became in him or incorporated in him, expectations too great for his abilities, which were above average, but not extraordinary. Furthermore he could not stand the aggressiveness of business. Aggressive businessmen, situations, and practices made him wilt. He could not fight. He really feared his father, rather than identifying with him as a son should, because his father was extra hard on him, recognizing the unusual, protecting maternal influence. His expectations and ambitions were his super-ego tendencies or social training. His fear, his instinctive nature, or his id, in psychoanalytic terminology, was of his super-ego and repressed aggression. The aggressive part of his instinctive or id nature, was suppressed and repressed by his fear of maternal, social or super-ego disapproval. His love impulses, his friendliness impulses, his creativity, constructive capacities, his abilities were swamped by the emotions of fear and repressed aggressiveness and hostility. His ego or rational capacities were tremendously handicapped by the overdeveloped fear and submerged aggressiveness. His intellect and his skills were not able or not free to express themselves adequately. Many of his symptoms were manifestations of the physiology of fear—namely nausea, diarrhoea, palpitation, weakness, dizziness. His indecision was a conflict between whether his mother's ideas or his own ideas should be the directing ones. Really, here was a situation of lost identity. Treatment was in a sense the quest for identity. It involved the development of security, self-respect, the management of fear and the mobilization of proper, normal, personal, social and professional aggressiveness. His feeling for the doctor, his respect for the doctor really might be thought of as the first step in his search and prospecting for health and competence. He had to develop the capacity to assert aggressiveness without guilt. With this new aggressiveness, self-respect, assertive-



ness, determination, a new personality emerged with effectiveness. As this developed his physiological autonomic symptoms greatly diminished and often disappeared and his psychological balances showed new orientations.

The development of this condition took over thirty years. The recovery and the therapy took a number of years. The latter involved the judicious and discriminating use of sedatives, hypnotics and anticholinergic drugs. But the recovery was not the result of the use of drugs alone. The therapy involved social, psychological and emotional factors. Psychological judgment was quite as important as medical judgment, and the start towards recovery was the result of the establishment of a secure, understanding relationship with the therapist. It was helping the patient develop a workable amount of security.

Psychotherapy was not explaining to the patient how he became ill. It was not making clear to him the development of his personality. However, the search for clarification is always important, and understanding of the etiological factors, however multiple in every case, is very important for the *therapist*. It is much more important for the doctor than for the patient. It is desirable, of course, if the patient can attain insight, that is to say understanding of the psychological forces at work in the development of his condition. However, practically this is often such a time-consuming procedure that it is not possible to accomplish it except, under minimal circumstances — certainly in a small proportion of cases. Therapy was not explaining how the patient became ill and the psychology of insecurity, maternal dependency, the repression of aggression, or hostility and the fear or guilt therefrom. It was not a discussion of psychosomatic medicine. It was a setting, providing an opportunity for a search for effectiveness and the acquisition of security. New experience was provided, new conditioning, much like the experiments of Pavlov. Such an experience was not just intellectual. It was not primarily intellectual. It was social, involving a relationship and it was emotional. There was a great deal of release of feeling, particularly the expression of fear and apprehension. However this was most often reported as physiology rather than psychology — nervousness, weakness, dizziness, palpitation, indigestion, lower abdominal pain and diarrhoea. The therapeutic process goes on without much awareness really. It is automatic and un-

conscious. An unconscious readjustment of the forces of the personality takes place and this does not take place as a result of intellectual understanding. The patient made a solid recovery and returned to work without the development of insight. There was a readjustment of the instinctive moral and super-ego forces of the individual so that the executive forces of the patient (ego-forces) could take over. Such a process of therapy requires usually a great deal of time. This is one of the great areas open for research. It is hoped that new techniques can be developed where a combination of drugs, milieu therapy together with psychological discussions and guidance will sometime greatly shorten the time required for effective therapy with many of our severely ill patients.

The psychological mechanism of identification with the therapist is of great importance in psychotherapy. The patient gradually takes over the point of view of the physician. The latter asks questions that are relevant and significant. He offers alternatives, experimental alternatives of procedure. He does not direct or dictate. He moves beyond the patient's immediate problems. He has hopes, he has confidence in human nature usually. No situation is so terrible that something constructive cannot be done. This process of identification is an automatic process and does not take place as the result of deliberation and decision.

Table 7 indicates in diagrammatic form the structure of the personality. There are three elements most helpfully thought of — namely the intellectual aspect or the ego, the instinctive emotional forces or the id, and the social training forces in the personality or the super-ego. The latter are the habits and expectations developed as the result of social pressures. The conflict in the majority of cases is between the social forces or habits or expectations, and the instinctive or emotional forces of the individual. The difficulties are not in the realm of the intelligence or the intellect. The I.Q.s of the majority of patients with nervous or mental or emotional conditions are adequate. In the patient described the conflict was between the maternal ambitions which were excessive and the fear of

them. He felt unable to achieve them. He also felt afraid of his father as a standard of masculine accomplishment. He also was afraid of men and their aggressive practice in business. He was really afraid of his own initiative, aggressiveness, anger and hostility. When these conflicts were diminished and worked through, his hyper-active autonomic responses subsided and disappeared. He was not aware of these mechanisms. This is what is meant by unconscious therapy. This can take place without insight and it can be very solid in my opinion. This may be very irritating to intelligent patients because they feel they should understand why their recovery or improvement has taken place, yet an explanation to many may be unwise and harmful. There is a regressive, entropic passivity, a drift toward illness, in most human beings. These tendencies can make use of many explanations. Pride, self-regard, which exist in most human beings and can be assets of course, can reject many explanations. Explanations can seem too simple. The severity of many illnesses may seem to the patient especially and often to the family to contradict simple explanations. One's pride and self-regard may be offended by many true but simple explanations. Therefore it is appropriate for a *physician to work on the basis of rather simple formulations or rather uncomplicated formulations yet not explain them to the patient*. If the patient himself works out these explanations then one is usually on solid ground. But in the long run it is best to adopt a pragmatic attitude and say "Well this seems to have some value to it, this formulation, this conceptualization; perhaps it is true. Other patients or other psychiatrists might find different explanations. Let us see whether this theory seems to have value, helps us in our understanding of your various symptoms and is of aid in searching for solutions of your difficulty." In this way dependence on the therapist is not developed, prejudice in the favor of whatever psychological theory is not unfairly weighted, and the patient is given the experimental opportunity of developing his own understanding of his behavior and improvement in his functioning. A physician should thus try to tap the constructive forces in the personality — whether one calls it eros,

elan, or the growth impulses of the patient. Psychotherapy should search for and mobilize the interests, assets and resources of the patient. The positive side is quite as important as the negative side — inadequacies and mistakes. So much of psychotherapy customarily involves attacking weaknesses, failures, mistakes instead of facilitating strengths and resources. The positive approach enables the patient to expand, take initiative, develop self-confidence and constructiveness. I often think of successful therapy as touching the positive impulses of the patient as indicated in the lower lines of the id forces of the personality in Table 7 — curiosity, interests, productiveness, creativity, togetherness, sharing, devotion to others, friendliness and love — devotion to standards and values rather than fear of them or hate of them. Patience, consideration and understanding and hope are great therapeutic forces. In this search for the constructive, in the development of constructive relationships with another human being, in the development of positive feeling, one should bear in mind forces indicated in No. 4 in diagram 7. They are really the various *needs of individuals*; the need for change, for security, for individuality, for difference, for respect, for understanding, for togetherness, for sharing, for accomplishment. Regard for these needs in a relationship will often help far more than translation of psychopathological understanding to the patient.

TABLE 7  
ELEMENTS OF THE PERSONALITY

1) <i>Ego</i> —the rational		
Perception		
Classification		
Correlation		
Truth		
Logic, reasoning		
Planning and problem solving		
4) <i>Personality Needs</i>		
Change, security, individuality, difference, respect, understanding, togetherness, accomplishment		
2) <i>Id</i> —the emotional		3) <i>Super-ego</i> —the social
Chemistry		Attraction — liking
Metabolism		Aversion — disliking
Energy		Identification, transference
Emotions and Impulses		Opposition — reversal
Love with		Expectations
Fear away		Aspirations
Hate against		Standards
Love includes: elan, eros, libido, growth, curiosity, interests, productiveness, creativity		Values
		Duty

Francis Peabody, one of the great physicians of his age said, "One of the essential qualities of the clinician is his interest in humanity, where the secret of the care of the patient is in caring for the patient." Modern practical basic psychotherapy proceeds on this basis.

In conclusion then, the point of view developed may be expressed in the following:

Psychotherapy is an experience.

It is a social experience — it takes place with another person. It can never be accomplished alone.

It is a collaborative experience.

It is basically a feeling or emotional experience.

It is a growth experience.

It proceeds largely *unconsciously* and automatically, like most growth phenomena.

It is thus not primarily a matter of resolution and deliberate decision.

It is not an intellectual exercise.

It is not primarily a matter of ideas — their transmission or infusion.

It is not a matter of logic.

It is not convincing the patient of the correctness of the doctor's understanding of his difficulties and his recommendations for solution.

It is not handing out ideas.

It is not an argument.

It is not a contest of wills.

It involves experiment and practice.

It includes determination and persistence.

The new type of experience offers opportunity for growth and development.

It affords the conditions for growth.

The atmosphere for growth is one in which the doctor offers patience, considerateness, respect, compassion, benevolence,

hope, asks questions raising opportunities for alternative actions and the clarifications of motivations and consequences.

It is not direction and the development of dependency, although dependency may appear as part of the process temporarily in the development of *security*.

These attitudes on the part of the therapist help develop security.

This is further given by accepting the patient the way he is, with all his faults, mistakes and suffering and irritations.

It involves an appreciation of his worth, however humble.

It offers respect for his individuality, potential worth and dignity.

It emphasizes assets and aspirations, the cultivation of interests and initiative.

These are often more important than the analysis of the negatives of failures and inadequacies.

This offers a new, creative, constructive, corrective experience.

It is a new type of conditioning.

This may be helped at times by the judicious use of drugs or medication.

There is a basic assumption that most individuals can grow to greater adequacy and maturity in their relationships if not blocked by obstacles. Such psychological obstacles may be loneliness, frustration, hostility, fear, distrust, guilt.

It recognizes the healing value of human interest — of one individual in another.

It recognizes the relief that comes from talking things out.

It recognizes the resources that develop in trial, experiment and discussion.

It relies on the alambics of patience, time and hope.

#### BIBLIOGRAPHY

Appel, Kenneth E., M. D.: "Psychotherapy", J.A.M.A. 172, 1343, March 26, 1960.

Appel, Kenneth E., M. D.: "The principles and practice of psychotherapy", Am. J. Psychoanalysis, 15, #2, 1955.

Appel, Kenneth E., M. D.: "Psychotherapy: general principles", J. South Carolina M. A., Vol. LIII, No. 10, Oct. 1957.

Appel, Kenneth E., M. D. and Astley, Royden C., M. D.: "Psychoanalysis" in the Cyclopedia of Medicine, F. A. Davis, Phila., Vol. II, pp. 423-457, 1950.

Freud, Sigmund, M. D.: "An Outline of Psychoanalysis", W. W. Norton & Co., New York, 1949.

This is a clear, brief account of psychoanalysis by its author in a small book of 123 pages.

Levine, Maurice, M. D.: "Principles of Psychiatric Treatment", in Dynamic Psychiatry, by Alexander and Ross. University of Chicago Press, p. 307, 1952.

This is probably the best account in the compass of 60 pages of psychotherapy in any language.

Peabody, Francis W., M. D.: "The Care of the Patient", Harvard University Press, Cambridge, Mass., 1927, p. 48.

Santayana, G.: "Three Philosophical Poets, Ch. IV. Goethe's Faust", Doubleday Anchor Books, New York, 1953.

Yaskin, H. E., M. D.: "Psychotherapy", in Rehfuess, Practical Therapeutics, The Williams and Wilkins Co., Baltimore, 1948, p. 715, tables 1 and 2.



# PERFORATION OF THE STOMACH IN NEWBORNS

## A REPORT OF TWO CASES

MOREY LIPTON, M. D.

*Instructor in Surgery, Medical College of South Carolina,  
Charleston, South Carolina*

R. RANDOLPH BRADHAM, M. D.

*Assistant Professor of Surgery, Medical College of South  
Carolina, Charleston, S. C.*

### *Introduction*

The first case of spontaneous rupture of the stomach in the newborn was reported by Siebold in 1825.<sup>1</sup> It was not until 1929 that an attempted repair was tried by Stern, Perkins and Neese,<sup>2</sup> however, it was only as recent as 1950 that the first survival following surgery was recorded by Legar, Picard, Leonard and Piette.<sup>3</sup> Vargas, Levin and Santulli<sup>4</sup> in 1955, and Moore and Chan<sup>5</sup> in 1957 reviewed the literature and reported 55 and 70 cases respectively. Hamrick<sup>6</sup> reported on 81 cases from the literature in September of 1959 and the interesting point made was that the overall mortality in this report was 81.5%. In a study of 5,160 autopsies, of which 1,778 were in patients two months or less, McCormick<sup>7</sup> found that the incidence of perforation of the stomach in this age group was one in every 860 cases (0.12%).

This report adds two more cases. Both were operated upon. Neither survived. Certain factors as to etiology and diagnosis are considered. Emphasis is placed on care, recognition and early repair.

### *Etiology*

There are probably many reasons why perforation of the stomach in the newborn occurs. The causes most frequently found in order of diminishing frequency are perforating gastric ulcer, hypoplasia or agenesis of portions of the gastric musculature, trauma, septicemia with ulceration and necrosis of the stomach, and distal obstruction of the gastro-intestinal tract.

Field, Northway and Manning<sup>8</sup> reported an incidence of gastric ulceration in 48% of the cases. They made reference to investigators who had found a high incidence of gastric

Spontaneous perforation of the stomach in newborns is a rare catastrophe which is associated with a high mortality. Only in the last decade have survivals been reported. Factors considered to be important in causing these perforations are gastric ulceration, congenital absence of the stomach musculature, trauma, septicemia and distal obstruction of the gastro-intestinal tract. Diagnosis is suspected when an infant who has been progressing satisfactorily suddenly develops abdominal distention and becomes critically ill. Diagnostic findings are discussed. Roentgenograms of the abdomen should be obtained immediately for detection of free air in the peritoneal cavity. Treatment consists of supportive care and immediate repair.

Two fatal cases are discussed.

acidity which reached adult levels in the first 24 to 48 hours of birth. This diminished to low levels at 5 to 6 days of life. Vargas *et al*<sup>4</sup> had previously assessed the incidence of perforation due to peptic ulceration as 50% in the cases reported in the literature. Kieswetter<sup>9</sup> reviewed some of the mechanisms which might incite peptic ulceration in the newborn. He focused attention on the possibility that anoxia either during birth or in the neonatal period might be sufficient stress to trigger the adrenal mechanism by which autodigestion of the stomach may take place. McCormick,<sup>7</sup> in 1959, reporting on a series of 7 cases, found that two of these cases had acute gastric ulceration. Vargas<sup>4</sup> found several other acute ulcerations near the site of perforation in one of the eight cases which he reported.

In 1943, Herbut<sup>10</sup> demonstrated histologically that in some of these newborns there

was a localized congenital defect in the musculature of the stomach through which perforation occurred. This finding has been supported by others.<sup>4, 11</sup> Ozkaragoz<sup>11</sup> reported two cases of spontaneous perforation of the stomach in premature siblings. Because the perforations in both seemed to be a localized congenital deficiency of the muscular wall of the stomach, a genetic defect was strongly suggested.

Trauma evidently plays a part in some of the perforations of the stomach which occur in newborns. McCormick<sup>7</sup> reported two cases which he attributed to trauma caused by a naso-gastric tube. Three of the cases reported by Vargas<sup>4</sup> were believed to be due to a naso-gastric tube. In one of these, a beveled polyethylene tube was found protruding through the stomach wall. There was only minimal inflammation at the punctate perforation. In two of the other cases, the intubation prior to perforation was apparently an etiologic factor. Hamrick<sup>6</sup> reported one case in which there was obstruction distal to the site of perforation. It is possible in this one case, as stated above, that the postoperative naso-gastric tube might have been a factor. One of the cases reported by Vargas<sup>4</sup> had atresia of the ileum and had a gastric perforation on the 15th day of life, 5 days after resection and entero-enterostomy. In this case the naso-gastric tube was again considered as a possible etiologic factor.

Another very important factor is that the majority of the cases reported in the literature were infants who were born prematurely. Both of our own cases were premature. Six out of eight of the cases reported by Vargas<sup>4</sup> and two out of three of the cases reported by Hamrick<sup>6</sup> were premature. In the overall literature more than 50% of the cases have occurred in premature infants.<sup>4, 6, 10</sup> The only report which markedly differs from this finding is that of Linker and Benson<sup>13</sup> who found only 2 of their 13 cases to be premature infants.

#### *Diagnosis*

Early diagnosis and surgical correction of the spontaneous rupture of the stomach in the newborn is mandatory if a decrease in the high mortality rate is to be accomplished. The onset is predominantly in the first week of life. The infant, often premature, does satis-

factorily following birth, taking food well and having normal stools. Fairly suddenly, the infant develops rather marked abdominal distention, regurgitates the formula, becomes cyanotic, and sometimes passes blood tinged stools. Periods of apnea might occur. The bowel sounds might be audible initially but soon become inaudible as ileus develops. The abdominal distention is not relieved by nasogastric tubes and suction. Fluids used for irrigation do not return. The diaphragm is elevated and liver dullness may not be percussable. Temperature elevation and blood count are usually not remarkable. Cellulitis and edema of the skin on the anterior abdominal wall may develop and confuse the picture with omphalitis. Development of subcutaneous emphysema with distinct crepitation over the anterior abdominal wall has been reported.<sup>8</sup> The most important diagnostic feature is that of abdominal roentgenograms. Pendergrass and Booth<sup>14</sup> pointed out that multiple x-ray films of the abdomen were essential to obtain a correct diagnosis. These should demonstrate free air in the peritoneal cavity. If the perforation is not closed, these symptoms are followed by peripheral vascular collapse, cardiac arrest and death.

#### *Case Reports*

Case 1. The patient was a 4 pound 4½ ounce colored male born prematurely by spontaneous delivery on December 4, 1958. He was doing satisfactorily until the fourth day of life at which time he quit taking his formula well, and developed a markedly distended abdomen which was tense and silent. The lower abdominal wall and genitalia were edematous and erythematous. Because of the marked swelling and discoloration of the scrotum, the patient was thought to have an incarcerated inguinal hernia with possible perforation of the hernial contents. Roentgenograms taken with the child both in the supine and upright positions revealed a large amount of free air in the peritoneal cavity. An air fluid level was present at the level of the first lumbar interspace. (Figure 1) The impression was that the patient had a perforation of a hollow viscus with a hydropneumoperitoneum. Abdominal exploration was carried out immediately. There was a 4 x 3 cm. perforated area on the anterior surface of the stomach which began just below the cardia and extended down to the incisura. The margin was necrotic. There was considerable edema in the lesser peritoneal sac. Gastric contents were dispersed throughout the peritoneal cavity marked generalized peritonitis was present. The necrotic margins of the stomach wall were excised and the defect closed with

a double row of sutures. The cause of the perforation was not apparent at operation. Urine output following operation was scant. The patient died on the second postoperative day. An autopsy was performed but did not reveal any additional information to that found at operation.

Case 2. The patient was a 4 pound 2 ounce colored male who was the first of twins born by cesarian section on February 4, 1959. The patient was apparently well until the fifth day of life when he vomited and aspirated gastric contents. Resuscitative measures were carried out. At this time the patient was noted to

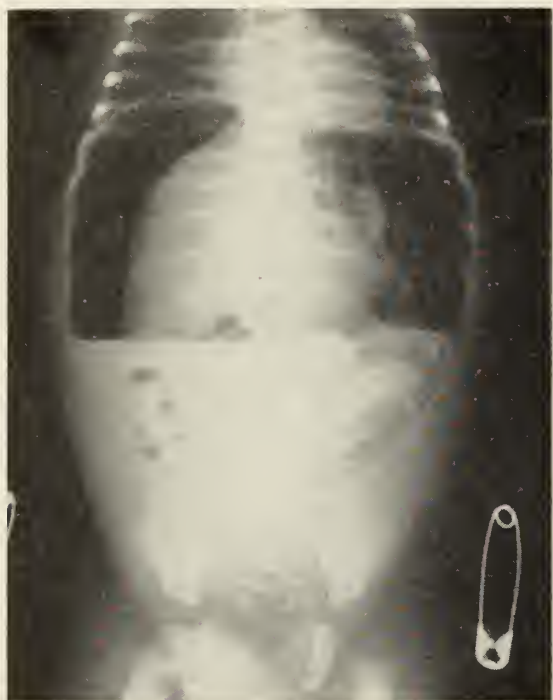


Figure 1

- (a) Supine position  
(b) Upright position. The superiority of this position for detection of free air in the peritoneal cavity is obvious.

Figure 2

- (a) Supine position  
(b) Upright position. Again the value of multiple x-ray films of the abdomen is demonstrated.



have marked tachypnea. There was erythema of the umbilicus and edema and erythema of the right inguinal region and scrotum. Peristalsis was active and the patient had a normal bowel movement on the day of these findings. A diagnosis of incarcerated inguinal hernia was initially entertained. Several hours later the patient became cyanotic, apneic and had cardiac arrest. He was resuscitated by epinephrine, caffeine and sodium benzoate. Roentgenograms of the abdomen at this time showed free air in the peritoneal cavity and subcutaneous emphysema of the right flank and scrotum. (Figure 2) Peristalsis had become inaudible and crepitation was palpable in the right inguinal region. A diagnosis of perforation of a hollow viscus was made. Laparotomy was carried out immediately. On the anterior wall of the stomach there was a perforation measuring 3 x 4 cm. which extended from the cardia to the midportion of the fundus of the stomach along the greater curvature. The borders were macerated and necrotic. There was a generalized peritonitis with large quantities of milk free in the peritoneal cavity. The necrotic borders of the perforation were excised and the stomach closed with a double layer of sutures. The peritoneal cavity was irrigated with saline. Following the completion of the operation the child had cardiac arrest and failed to respond to all resuscitative measures. An autopsy was performed. Cultures taken of the blood at autopsy revealed 100% *Escherichia coli*. Cultures taken from the naso-pharynx and peritoneal cavity revealed the same organism. Cause of the perforation was not determined at either operation or autopsy.

#### Comment

No definite cause for perforation was established in either case. However, these two cases had certain clinical features which suggested that a congenital malformation of the stomach musculature might have been a cause for perforation. The perforations in the two cases were similar in location and appearance. No definite musculature at the site of perforation was apparent by gross inspection. The perforations were large, indicating that trauma associated with the naso-gastric tube alone was not the only etiologic factor. It is conceivable, however, that perforation could have occurred at the site of a congenitally weakened wall by the use of the naso-gastric tube. Resuscitative measures at the time of birth were not used in either case, so this could not be considered as a basis for perforation. In Case 2 there was generalized septicemia of *E. coli*. Whether this was present prior to perforation is not known. Both of our patients were premature infants. The initial diagnosis in both of our cases was incarcerated

inguinal hernia. This is understandable in that the findings of edema and erythema first presented in the inguinal scrotal regions. Abdominal distention quickly followed.

If the survival rate for this condition is to improve, it will be necessary for those persons intimately associated with infant care to be familiar with and to have a high index of suspicion for this catastrophic condition. Any infant, previously progressing satisfactorily, who suddenly develops abdominal distention, should have roentgenograms of the abdomen immediately. The appearance of cellulitis and edema of the anterior abdominal wall, umbilical area or genitalia should increase one's suspicion of the diagnosis of perforation of a hollow viscus.

Treatment consists of supporting the child as well as possible for operation and performing this immediately. Early diagnosis and early closure of the perforation should improve the rate of survival. Any gastric contents free in the peritoneal cavity should be removed. Peritoneal irrigation with saline solution containing a million units of penicillin and a gram of streptomycin might be beneficial.

#### Summary

Spontaneous perforation of the stomach in newborns is a rare catastrophe which is associated with a high mortality. Only in the last decade have survivals been reported. Factors considered to be important in causing these perforations are gastric ulceration, congenital absence of the stomach musculature, trauma, septicemia and distal obstruction of the gastrointestinal tract. Diagnosis is suspected when an infant who has been progressing satisfactorily suddenly develops abdominal distention and becomes critically ill. Diagnostic findings are discussed. Roentgenograms of the abdomen should be obtained immediately for detection of free air in the peritoneal cavity. Treatment consists of supportive care and immediate repair.

Two cases have been presented and discussed. Neither child survived.

#### REFERENCES

1. Siebold. Cited by Theile, P.: Ueber Geschwürsbildungen des Gastroduodenaltractus in Kinder-

- salter. *Ergebn. inn. Med. u. Kinderh.* 16:302, 1919.
2. Stern, M. A., Perkins, E. L., and Nessa, N. J.: Perforated gastric ulcer in a two-day old infant. *Journal-Lancet* 49:492, 1929.
3. Léger, J. L., Ricard, P. M., Leonard, C., and Piette, J.: Ulcère gastrique perforé chez un nouveau-né avec survie. *Union méd. Canada* 79:1277, 1950.
4. Vargas, L. L., Levin, S. M., and Santulli, T. V.: Rupture of the stomach in the newborn infant. *Surg. Gynec. & Obst.* 101:417, 1955.
5. Moore, J. B., Chan, L.: Spontaneous rupture of the stomach in the newborn: a report of two cases. *Surgery* 42:484, 1957.
6. Hamrick, L. C.: Gastric perforation in the newborn infant. *J.A.M.A.* 171:411, 1959.
7. McCormick, W. F.: Rupture of the stomach in children. Review of the literature and report of 7 cases. *A. M. A. Arch. Path.* 67:416, 1959.
8. Field, E. M., Northway, R. O., and Manning, J. W., III: Perforation of the stomach in the newborn. *J. Michigan M. Soc.* 58:1262, 1959.
9. Kiesewetter, W. B.: Spontaneous rupture of the stomach in the newborn. *A. M. A. Am. J. Dis. Child.* 91:162, 1956.
10. Herbut, P. A.: Congenital defect in the musculature of the stomach with rupture in a newborn infant. *Arch. Path.* 36:91, 1943.
11. Ozkaragoz, K., and Stewart, C. S.: Spontaneous rupture of the stomach in two premature newborn siblings. *Texas J. Med.* 55:305, 1959.
12. Musser, H. H.: The etiology of rupture of the stomach in the newborn. *Ohio M. J.* 52:838, 1956.
13. Linkner, L. M., Benson, C. D.: Spontaneous perforation of the stomach in the newborn: analysis of thirteen cases. *Ann. Surg.* 149:525, 1959.
14. Pendergrass, E. P., and Booth, R. E.: Report of a case of ruptured stomach in an infant three days old. *Am. J. Roentgenol.* 56:590, 1946.

## CAROTID BODY TUMORS—CHEMORECEPTOMAS

G. B. HODGE, M. D.

W. C. HAGGERTY, M. D.

JOSEPH HODGE, M. D.

*From the Hodge Clinic and the Department of Surgery,  
Spartanburg General Hospital, Spartanburg, S. C.*

The significance of the pathological and surgical aspects of tumors of the carotid body has only recently become clearly understood.<sup>1-8</sup> Some of the earlier confusion regarding the nature of these tumors resulted from reports in the literature based on a limited experience. There has been some who believed that all carotid body tumors are benign. This contention has been shown to be erroneous. Some carotid body tumors are malignant and some have had distant metastasis.

In certain cases of carotid body tumor surgical extirpation has resulted in serious complications, morbidity, and a high mortality. This has been a restraining factor in carrying out a bold, definite resection of these lesions.

It may be well at this point to clarify terminology. Carotid body tumors are known by a variety of names, i.e., carotid glomus, non-chromaffin paraganglioma, chemodectoma, and carotid chemoreceptoma. The last term is more applicable to these tumors. These tumors are multicentric and are encountered in many sites where chemoreceptor tissue is found. In

In a review of all admissions to the Spartanburg General Hospital over a six year period, five cases of carotid body tumor were encountered. Four cases represented benign neoplasms and one was malignant with regional lymph node metastasis.

The pathological and clinical factors of carotid body tumors are described. The five cases are discussed in detail as well as the surgical management.

The rarity of these neoplasms is borne out by the statistical data presented.

addition to those tumors at the carotid bifurcation the following chemoreceptomas are recognized: the glomus jugulare, aortic body, ciliary glomus, femoral and vagal glomus as well as the well-known neuro-myioarterial glomus noted in the finger tips.

All cases of carotid body tumor observed at the Spartanburg General Hospital from January 1, 1954 to January 1, 1960 have been reviewed. Five cases of carotid body tumors are in this series. Cases 1 and 4 were managed by the authors. These two patients had bilateral benign carotid body neoplasms. Of the remaining three cases one was malignant. The cases will be described in detail later.

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### *The Carotid Body*

The carotid body is a small reddish-brown oval shaped structure about 5 mm. in diameter, located at the bifurcation of the common carotid artery. It is enveloped by a fibrous capsule with projecting trabeculae dividing the carotid body into lobules. The epithelioid cells of the carotid body are arranged in cords surrounded by a rich sinusoidal blood supply and a network of nerve fibers.

There is no unanimity of opinion regarding the embryology of the carotid body. Some consider that it originates from mesenchymal elements while other believe it arises from ectodermal neural elements.

The afferent sensory nerve fibers from the carotid body join the branches of the glossopharyngeal nerve which supplies the carotid sinus. Sympathetic nerve fibers pass through the carotid body by way of the arterial blood supply. No function of these nerve elements is known.

The carotid body lacks affinity to chromaffin staining hence the name non-chromaffin paraganglioma. Neither the carotid body nor its tumors liberate epinephrine. There is no endocrine function of this structure.

The carotid body is a chemoreceptor and is sensitive to changes in oxygen tension,  $\text{CO}_2$ , and pH of blood. A decrease in  $\text{O}_2$  tension, increase in  $\text{CO}_2$ , or in lowering of the plasma pH, the carotid body is stimulated and this results in afferent impulses by way of the glossopharyngeal nerve to the brain with efferent impulses causing hyperventilation and an increase in the arterial blood pressure.

#### *Pathological and Clinical Features*

The only known pathology affecting the chemoreceptor system is tumor formation. Neoplasms of the chemoreceptor system are non-chromaffin and have no endocrine function. These tumors are usually slow growing and may be present for years before causing symptoms. They are also known to be multicentric.

The incidence is most prevalent in the third and fourth decades of life. There is no sex predilection.

The most frequent presenting complaint is a mass in the neck just below the angle of the mandible. Large tumors may bulge into the

pharynx and cause dysphagia. Pressure on the facial, hypoglossal, glossopharyngeal, and vagus nerves may result in paralysis. The carotid sinus syndrome is not an infrequent complication as well as cerebral manifestations of arterial insufficiency from obstructive pressure of the neoplasm. Horner's syndrome may be noted in large neoplasms.

These tumors appear lobulated and may encircle the carotid bifurcation. Frequently they are intimately adherent to the adventitia of the carotid vessels. A bruit may be heard over the more vascular lesions. One can move the lesion horizontally but not vertically. This may aid in the differential diagnosis of lateral cervical masses.

Tumors of the carotid body tend to mimic the structure from which they arise. The cells are large polyhedral epithelioid with a finely granular pale cytoplasm. The nuclei are round or oval. The cells may be arranged in cords or in an alveolar fashion. The stroma is highly vascular. Mitosis is rare, but local invasion of the capsule is occasionally noted. Malignant chemoreceptoromas are known to metastasize to distant structures.

#### *Surgical Management*

The treatment of carotid body tumors is surgical excision. In small tumors and in those that do not encircle and intimately adhere to the carotid bifurcation, no technical difficulties are encountered in resection. Most of these tumors are benign. In the larger neoplasms, particularly the malignant lesions, which are intimately adherent to the carotid vessels, surgical excision is attended with a high mortality and morbidity.

Trauma to the artery may result in serious hemorrhage necessitating ligation of the vessels of the carotid bifurcation or in thrombosis of these vessels.

Ligation of the carotid vessels or thrombosis results in varying degrees of contralateral hemiplegia. However, at times, in order to extirpate these lesions, one may have to sacrifice the common, external and internal carotid arteries. Should this be necessary, the surgeon should be prepared to carry out a bridging arterial graft from the common carotid artery to the stump of the extracranial portion of the internal carotid artery. In the cases of a be-



nign chemoreceptoma, one may be hesitant to embark on such a formidable procedure. However should the lesion prove to be malignant the risks are justified.

The surgical approach to these tumors should be through a long lateral incision in the neck, extending from the tip of the mastoid process to the attachment of the sternocleidomastoid muscle at the sternum. The incision is made along the anterior border of this muscle. It is important to have adequate exposure of the external, internal, and common carotid arteries well above and below the lesion. The vessels should be encircled with tapes in order to control hemorrhage. The surgeon should be prepared for arterial grafting or bypassing should it be necessary to extirpate the carotid bifurcation. A careful and meticulous dissection with care being directed to avoid trauma to the major blood vessels and nerves will facilitate the excision of these lesions. It is necessary to dissect these lesions from the adventitia of the carotid arteries. If a good cleavage plane is obtained, the removal is easy and simple. However, if the carotid bifurcation is encircled by the tumor, the dissection is slow and tedious and the hazards are great. Lahey has advocated a graceful retreat in these cases and a resort to x-ray therapy. Unfortunately, most of these tumors are radio-resistant.

#### Case Reports

Case No. 1—LCV. The patient was a 32 year old white married female, who was admitted to the hospital on October 8, 1954 with a complaint that she had noticed a mass of two years duration in the left side of her neck. The mass gradually increased in

size and she noted discomfort in the neck. In 1945, she had a similar mass in the right side of the neck and was operated upon at the Duke University Hospital. She was found to have a carotid body tumor encircling the carotid bifurcation. The surgeon resected the tumor mass with the carotid bifurcation. Following surgery, she developed a transient left hemiparesis.

The examination revealed a well-developed, well-nourished, 32 year old white female. The blood pressure was 140/90 mm. Hg. There was a long cicatrix on the right side of the neck paralleling the anterior border of the sternocleidomastoid muscle with a "T" forming the upper portion of the scar. At the level of the left carotid bifurcation, there was a visible and palpable mass measuring about 3 cm. in diameter. The mass was firm and could be displaced laterally, but not vertically. The remainder of the examination was entirely normal. The hemoglobin was 12 grams/100 ml. white blood count 7,750 cu. mm. The differential count was not remarkable. A diagnosis of carotid body tumor was made. On October 9, 1954, the patient was carried to the operating room and under general endotracheal anesthesia, an incision along the anterior border of the sternocleidomastoid muscle was made from a point just below the mastoid process to the clavicle. A meticulous dissection was carried out exposing the carotid bifurcation. A tumor measuring about 3 cm. in diameter was encountered at the carotid bifurcation and the tumor mass was intimately adherent to the carotid bifurcation and encircled this structure. A cleavage plane in the adventitia of the common carotid artery was developed and carried up to the capsule of the tumor mass, however, the tumor mass was found to be so intimately adherent to the carotid bifurcation that it was felt that attempted resection of this tumor would most likely result in injury to the vessels. In view of the fact that she had had her right carotid bifurcation previously excised we felt that further manipulation of the tumor mass would be extremely hazardous and decided on post-operative x-ray therapy.

She was discharged from the hospital on October

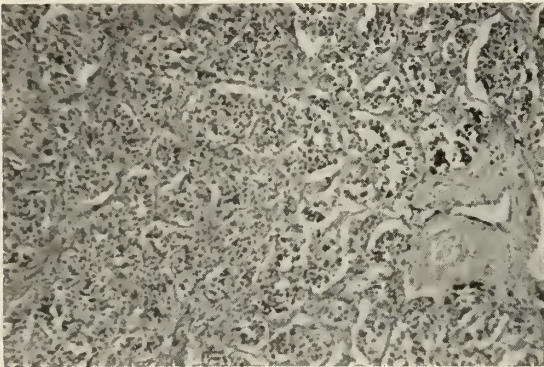


Figure 1A—100X

Photomicrograph of a benign chemoreceptoma removed from Case 4. Note the alveolated arrangement of the cells surrounded by a rich sinusoidal network.

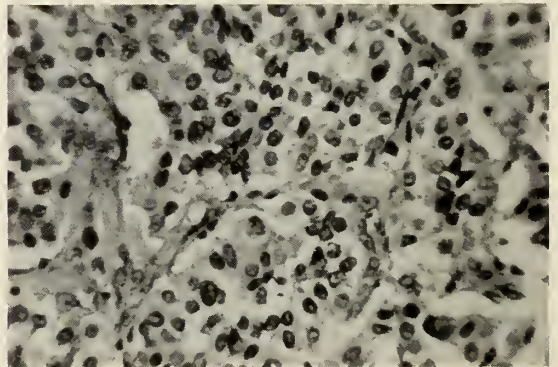


Figure 1B—430X

This reveals the large polyhedral epithelioid cells with a fine granular cytoplasm. The nuclei are round to oval and take up staining in an even manner.

10, 1954 with the operative wound well-healed. She received a course of deep x-ray therapy to the tumor. On follow-up, she was relatively asymptomatic and the tumor mass was essentially unchanged in size.

Pathological examination of the tissue revealed a fibrous vascular capsule without evidence of invasion by tumor tissue. Small groups of polyhedral epithelioid cells characteristic of carotid body tumor was noted. No mitosis was present. A diagnosis of benign carotid body tumor was made.



Figure 2A—100X

*Photomicrograph of a malignant chemoreceptoma in Case 5. Note the diffuse cords of hyperchromatic cells with a rich sinusoidal blood supply.*

Case No. 2—DPRH. The patient was a 46 year old white married female. She was admitted to the hospital on June 3, 1956 with the complaint of a mass in the right side of the neck. A history was obtained that she noted the mass in this region some three years previously. She had a goiter at that time and two years before admission a subtotal thyroidectomy was performed elsewhere. She stated that the mass high in the right side of the neck gradually increased in size. The examination revealed a well-developed, well-nourished 46 year old white female. Her blood pressure was 130/80 mm. Hg. There was a 4 by 3 cm. mass in the right side of the neck just below the angle of the jaw. The mass was firm and non-tender and was noted to be movable. The remainder of the examination was essentially normal. On June 4, 1956, an exploration of the right side of the neck was carried out and the patient was found to have an extremely vascular spongy mass overlying the carotid bifurcation. The mass was removed without difficulty. Pathological analysis revealed a soft encapsulated tumor mass measuring 4 by 3 cm. in size. On cross section it was noted to be encapsulated and composed of rather soft tissue with small areas of hemorrhage. Microscopically the tumor was composed of large polyhedral cells arranged in an alveolar fashion with groups of cells separated by strands of connective tissue. The nuclei were even in size, shape and staining and no mitosis was seen. A diagnosis of benign carotid body tumor was made. The patient was discharged from the hospital improved on June 7, 1956.

Case No. 3—SJMS. The patient was an 80 year old white female who was admitted to the hospital on August 20, 1958, because of hypertrophied toenails involving both great toes and swelling in right side of the neck with intermittent foul odor of her breath. The past history revealed that she had a hysterectomy in 1952 and subsequently had excision of a cervical stump because of carcinoma. In 1953, she had a fracture of the neck of the left femur and this was treated by pinning. Examination revealed a senile 80 year old female whose blood pressure was 160/80 mm. Hg. and weight 108 pounds. A mass in the right side of the neck considered to be cystic. The lungs were clear. The heart was not enlarged, there was no arrhythmias, however there was marked generalized arteriosclerosis. A diagnosis of esophageal diverticulum presenting itself in the right side of the neck was made. An x-ray study on August 22, 1958 failed to reveal any ab-

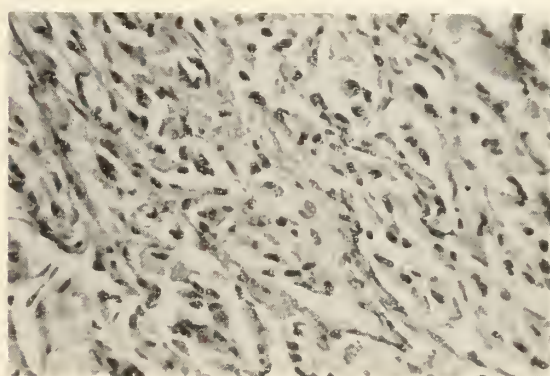


Figure 2B—430X

*The cells are more pleomorphic with hyperchromatic nuclei and mitosis.*

normalities of the oral pharynx or esophagus. A chest roentgenogram showed the heart to be normal in size. There were numerous areas of densities scattered throughout the right lung suggestive of inflammatory disease. The hemoglobin was 11.1 gms., white blood count 13,300, segs 73%. ECG revealed left axis deviation and arteriosclerotic heart disease. On August 21,

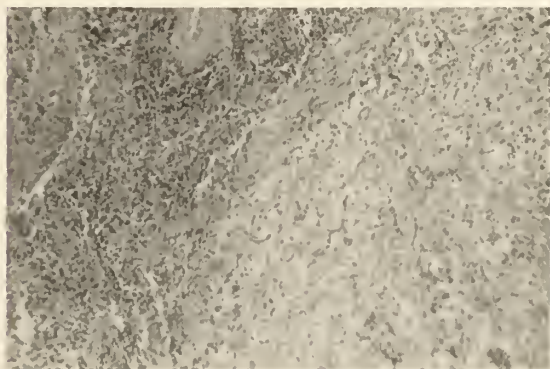


Figure 2C—100X

*This photomicrograph reveals diffuse metastatic involvement of the malignant chemoreceptoma in a regional lymph node.*



1958, the patient had excision of the toenails. On September 4, she was again carried to surgery where under endo-tracheal anesthesia, the right side of the neck was explored and a mass at the carotid bifurcation was excised. Gross pathological examination revealed an oval mass about 4 cm. in diameter which was encapsulated and on cut surface revealed a homogenous consistency. The microscopic analysis revealed clusters and alveolated nests of round cells with abundant cytoplasm. The tumor was divided into irregular lobules by bands of dense fibrous tissue containing a rich blood supply. A diagnosis of benign carotid body tumor was made. The night of surgery the patient developed edema in the neck with respiratory distress and a tracheostomy was carried out. After a prolonged hospital stay she was discharged improved on October 12, 1958.

Case No. 4—JKP. This 40 year old white male was admitted to the hospital on May 10, 1959 with the complaint of a mass in the left side of the neck just below the angle of the mandible. A history was obtained that some two years previously he had a mass in the right side of the neck which was excised elsewhere and a diagnosis of carotid body tumor was made. A year later, he noticed a mass on the left side which has gradually increased in size. He was operated upon in another hospital under local anesthesia and apparently the surgeon missed the mass and excised a small lymph node which was normal. The patient's past history was essentially negative. The family history was positive for cancer.

Physical examination showed a well-developed, well-nourished, 40 year old white male. Weight was 143 lbs. and the blood pressure was 120 / 80 mm. Hg. The examination revealed a scar in the right side of the neck along the anterior border of the sternocleidomastoid muscle and there were two operative scars on the left side of the neck below the carotid bifurcation. At the level of the carotid bifurcation there was a firm, almost stony, hard mass which was slightly lobulated and could be displaced horizontally but not vertically. The remainder of the examination was normal. A diagnosis of carotid body tumor was made, however, the possibility of metastatic carcinoma from

the thyroid gland was considered. On May 15, 1959, an exploration of the left side of the neck was carried out through a long incision along the anterior border of the sternocleidomastoid muscle and the carotid bifurcation was exposed. A 3 cm. mass was dissected from the carotid bifurcation with ease after a cleavage plane was developed between the mass and the adventitia of the carotid vessels. Pathological analysis revealed the cut tumor to have a homogenous tan appearance. Microscopically it was composed of nests of epithelioid cells which were polyhedral in outline. The cytoplasm was fine and granular and the nuclei were uniform in appearance. There was an occasional hyperchromatic cell. The cell nests were surrounded by a thin vascular ring of connective tissue stroma. There was no invasion of the capsule. The diagnosis of a non-chromaffin paraganglioma or carotid body tumor was made. The patient had an uneventful post-operative recovery and was discharged from the hospital on May 20, 1958, improved. The patient was last seen on April 6, 1960. There was no evidence of recurrent tumor in the neck and he was actively engaged in his occupation.

Case No. 5—DDS. The patient is a 45 year old white male who was admitted to the hospital on August 2, 1959 primarily because of bilateral inguinal hernias of one year duration. Also a history was obtained that he had a mass in the left side of the neck for some four of five years. A lymph node was excised at that time and reported to be normal. The tumor was not excised and he stated that it caused him no symptoms. Examination revealed the blood pressure to be 130/90 mm. Hg. There was a 4 by 6 cm. mass in the left side of the neck which seemed to be fixed. No palpable nodes were made out and the thyroid gland was not enlarged. There was a short scar overlying the mass in the left side of the neck from previous surgery. The heart and lungs were normal. There were bilateral direct inguinal hernias. The diagnosis of possible malignant branchial cleft cyst was made.

On August 3, 1959, he had a bilateral inguinal herniorrhaphy and on August 6, 1959, under general endo-tracheal anesthesia an incision was made in the

ANALYSIS — 5 CASES OF CAROTID BODY TUMORS

Case #	Sex	Age	Side of Involvement	Benign Malignant	Follow-up
1	F	32	Bilateral	Benign	well—no recurrence
2	F	46	Right	Benign	well—no recurrence
3	F	80	Right	Benign	well—no recurrence
4	M	40	Bilateral	Benign	well—no recurrence
5	M	45	Left	Malignant	well—no recurrence
		Average			
		48.6 yrs.			

TABLE 1



left side of the neck and the tumor was exposed. The tumor encircled the carotid bifurcation. Biopsy of the tumor was done and a lymph node was excised. Frozen section diagnosis was reported to show a malignant carotid body tumor with invasion of the contiguous lymph node. The tumor was described as consisting mainly of lobules, one being superficial and one deep. The carotid artery bifurcation was completely involved in this mass and the vessel was described as being invaded by the mass. The surgeon felt that it would be hazardous to excise the carotid bifurcation, therefore the operation was terminated. The patient was discharged from the hospital on August 15, 1959, and was referred elsewhere where the mass was excised, including the carotid bifurcation, and a bridging arterial graft carried out. He had a prolonged post-operative course complicated by multiple nerve paralysis and dysphagia. A final diagnosis of malignant carotid body tumor was made. A recent follow-up by his surgeon revealed no evidence of recurrence of the neoplasm and the patient is well.

### Discussion

During the six year period from January 1, 1954 to January 1, 1960, there were 105,067 admissions to the Spartanburg General Hospital. During the same period there were 3,369 who were admitted because of neoplasms. Of these, 1,641 had malignant neoplasms and 1,728 had benign tumors.

The total number of patients with benign and malignant tumors made up 3.26 per cent of all admissions. Those with malignant neoplasms comprised 1.56 per cent of all admissions, whereas those with benign tumors made up 1.70 per cent of all admissions.

Carotid body neoplasms comprised 0.15 per cent of all patients with tumors. The one case of malignant carotid body tumor was .06 per cent of all cases of malignant tumors observed. The four patients with benign tumors

made up .23 per cent of all cases with benign tumors.

Statistically, the occurrence of carotid body tumor is rare. The occurrence of malignant carotid body tumors in this series of carotid body neoplasms was 20 per cent. It is true, the series is small for a statistical analysis, however, this experience is similar to that reported in recent years.

The multicentric nature of these tumors is borne out in two cases. These patients had bilateral tumors at one time or another.

Two patients had lesions only in the right side of the neck and the one case of malignant carotid body tumor had involvement in the left side of the neck.

Three patients were female and two male, the malignant lesion occurring in a male. The ages of the patients ranged from 32 years to 80 years with an average of 48.6 years. All patients were white.

A recent follow-up of all patients was made. They were all living and well without evidence of recurrence.

### Summary

A review of the clinical, pathological, and surgical aspects of carotid body tumor is presented. Five cases of carotid body tumors observed at the Spartanburg General Hospital over a six year period have been analyzed. Four cases were benign and one was malignant. Two cases of benign carotid body tumors had bilateral involvement thus demonstrating the multicentric nature of these neoplasms. All patients are living and well without evidence of recurrence.

### REFERENCES

1. Burman, S. O.: The chemoreceptor system and its tumor—the chemodectoma. *Internat. Abstr. Surg.* 102:330, 1956.
2. Lahey, F. H., and Warren, K. W.: Tumors of the carotid body. *Surg. Gynec. & Obst.* 85:281, 1947.
3. Lahey, F. H., and Warren, K. W.: A long term appraisal of carotid body tumors with remarks on their removal. *Surg. Gynec. & Obst.* 92:481, 1951.
4. MacComb, S.: Carotid body tumors. *Ann. Surg.* 127:269, 1948.
5. Pettet, J. R., Woolner, L. B., and Judd, E. S., Jr.: Carotid body tumors (chemodectomas). *Ann. Surg.* 137:465, 1953.
6. Sessions, R. T., McSwain, B., Carlson, R. I., Scott, H. W., Jr.: Surgical experiences with tumors of the carotid body, glomus jugulare and retroperitoneal nonchromaffin paraganglia. *Ann. Surg.* 150: 808, 1959.
7. Warren, W.: Tumors of the carotid body, recognition and treatment. *S. Clin. North America* 33: 677, 1953.
8. Warren, K. W.: Some observations on carotid body tumors. *S. Clin. North America* 39:621, 1959.

# OPEN HEART SURGERY USING HEART-LUNG BYPASS AND HYPOTHERMIA

WENDELL B. THROWER, M. D.

*Assistant Professor of Surgery, Medical College of South Carolina*

JOHN A. BOONE, M. D.

*Professor of Medicine, Chairman, Director of Heart Clinic, Medical College of South Carolina*

RICHARD G. PRICE, JR., M. D.

*Resident in Surgery, Medical College of South Carolina*

JAMES C. HUGHES, III, M. D.

*Resident in Surgery, Medical College of South Carolina*

Surgery using the cardiopulmonary bypass with a pump-oxygenator to permit open exploration of the heart under direct vision surgery has advanced rapidly in recent years to the point where many previously inoperable intracardiac defects can now be successfully and safely corrected (Table I). The pioneer work of Gibbon, Lillehei, Kirklin, Gross and others have made the pump-oxygenator procedure safe in many medical centers.<sup>2-6, 8, 10, 11</sup>

The rotating disc oxygenator was developed by Kay and Cross of Cleveland, later modified at Harvard, and manufactured by the Mark Company of Boston.

A team was trained at the Medical College of South Carolina in the use of this oxygenator by using animals prior to its use in human patients. Results of this and other animal work are published elsewhere.<sup>1, 3, 12-14</sup> In August 1959, after approximately eight months of preparation in the laboratory, the first human operation using this disc oxygenator at the

The authors present a series of illustrative cases to indicate the range of modern open-heart surgery in various cardiac conditions.

Medical College Hospital was attempted and it was successful. Since then a variety of intracardiac lesions have been corrected surgically and illustrative cases operated on by one of us (WBT) are reported herein.

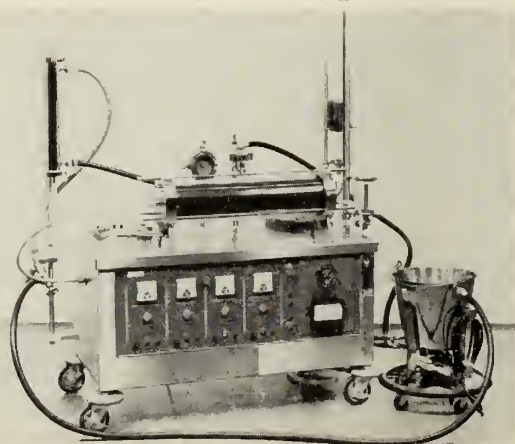


Figure 1

Mark Disc Oxygenator with Heat Exchanger Apparatus

The principle of oxygenation involves the filming of blood on rotating discs where it is exposed to an atmosphere of oxygen-carbon dioxide mixture in a ratio of 97:3. By means of plastic cannulae inserted into the vena cava through the wall of the right atrium blood is siphoned into a reservoir. Here the blood is oxygenated and returned to the patient by a DeBakey pump to an artery. Blood that escapes from the cardiotomy is returned to the oxygenator by means of a low pressure suction pump for use again. The temperature of the extracorporeal blood is regulated by means of a heat exchanger which not only maintains the temperature of the blood at any desired level but can also raise or lower the temperature at a very rapid rate without damaging the constituents of the blood. With the use of this heat exchanger, simultaneous hypothermia and cardiopulmonary bypass are possible.

TABLE I

Defects Which Can Be Corrected by Open Heart Surgery

Atrial septal defect	Congenital Lesions:
Pulmonic stenosis	Atrioventricularis communis
Ventricular septal defect	Tricuspid stenosis
Tetralogy of Fallot	Ebstein's disease
	Anomalous pulmonary venous drainage
	Acquired Defects:
Aortic stenosis	Ventricular aneurysm
Aortic insufficiency	Aneurysm of the thoracic aorta
Mitral insufficiency	Tumor of left atrium (Myxoma)
Complicated mitral stenosis	

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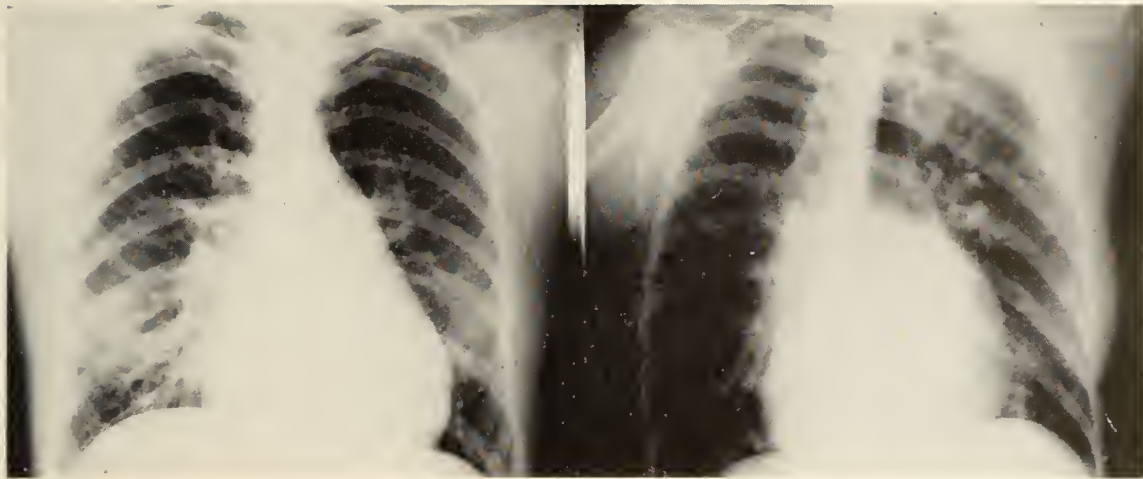


Figure 2

Case I. Atrial Septal Defect.

Note enlargement of pulmonary artery, accentuation of the vascularity of the lung fields, and right ventricular enlargement.

#### Case I: Atrial septal defect

A 26 year old mother of four was referred for open heart surgery with "three pillow" orthopnea, paroxysmal nocturnal dyspnea, and progressive dyspnea on exertion. She had "heart disease" as a child which was thought to be due to rheumatic fever. Approximately six months prior to admission to the Medical College Hospital, she was admitted to a hospital for an episode of acute cardiac decompensation.

Physical examination showed a well-developed white female who could not lie flat without dyspnea. The blood pressure was 120/70 mm. Hg, pulse 80 per minute and regular. There was a right ventricular

lift. A systolic thrill over the second and third intercostal spaces to the left of the sternum was palpable and accompanied by a grade III blowing systolic murmur. The pulmonic second sound was markedly accentuated. The liver was palpable 3 cm. below the right costal margin. An ECG showed right ventricular hypertrophy.

Chest fluoroscopy and films showed gross congestion and accentuation of the vascularity of the lung fields, a markedly enlarged pulmonary artery, and pronounced hilar dance and right ventricular enlargement (Figure 2).

Through a right lateral thoracotomy with the aid

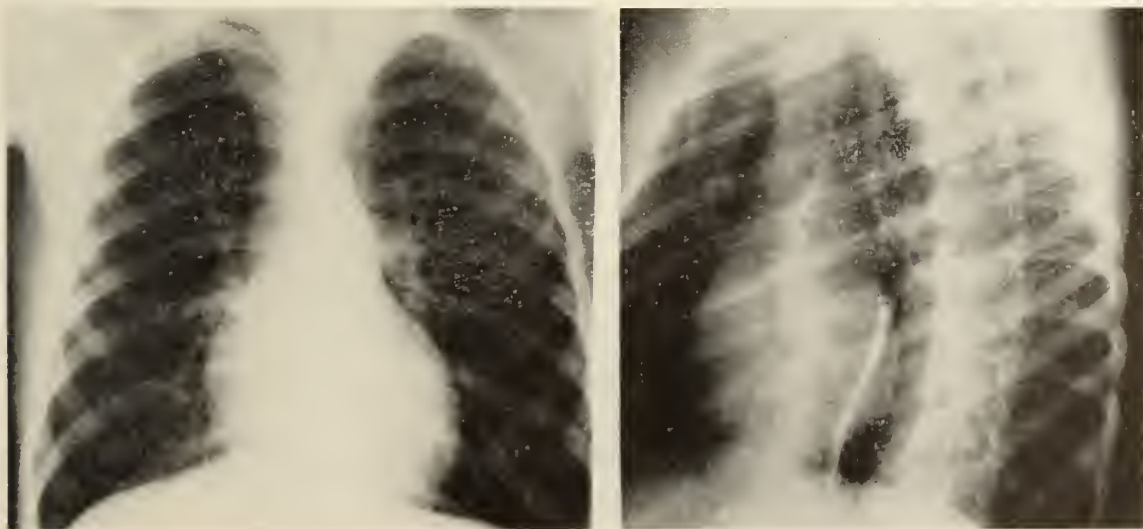


Figure 3

Case II. Atrial septal defect with right ventricular hypertension and pulmonic stenosis.

PA and oblique films showing right ventricular hypertrophy, only mild increase in pulmonary vascularity, and increased prominence of the pulmonary artery (post-stenotic dilatation).



of total cardiopulmonary bypass with a Mark disc oxygenator for 15 minutes, a secundum atrial septal defect measuring 3 x 4.5 cm. was repaired primarily. The patient recovered rapidly from the operation and after 48 hours was ambulatory. She was discharged on the 15th postoperative day. At that time no murmur was audible. Follow up at one year revealed that she was completely asymptomatic and working as a nurses' aid in addition to performing her family duties as a mother of four children.

*Case II: Atrial septal defect with right ventricular hypertension and pulmonic stenosis.*

A 6 year old white male was noted to have a heart murmur 1½ years prior to admission for operation. At the age of 1½ years it was noted that he had gasping respirations. He had had episodes of dyspnea both at rest and after exercise.

Physical examination revealed underdevelopment. Blood pressure was 120/60 mm. Hg. There was a harsh grade III systolic murmur with an accompanying thrill in the second and third left intercostal spaces. The pulmonic second sound was accentuated.

X-rays and fluoroscopy revealed hypertrophy of the right ventricle, increased prominence of the pulmonary artery, and increased vascularity of the lung fields (Figure 3). ECG revealed right ventricular hypertrophy with questionable digitalis effect. Right heart catheterization revealed right ventricular hypertension (50/0) without a jump in oxygen saturation between the superior vena cava, atrium, or ventricle. The pulmonary artery could not be entered.

On March 1, 1960 the patient underwent cardiopulmonary bypass through median sternotomy and

right atriotomy with closure of an auricular septal defect measuring 2 x 1.5 cm. and correction of minimal pulmonic valvular stenosis. Deliberate hypothermia was utilized to maintain the temperature during total perfusion at 32° C. The flow rate was 2.3 liters per square meter per minute. Total bypass time was 39 minutes.

The postoperative course was uncomplicated except for a fever which subsided completely by the end of the 6th postoperative day. The patient was ambulatory on the 3rd postoperative day and was discharged afebrile and asymptomatic on the 8th postoperative day.

*Case III: Total anomalous right lung venous drainage with atrial septal defect.*

A 14 year old white boy was referred for evaluation having had a known heart murmur since early childhood. At the age of 3 years he began to have frequent episodes of "pneumonia". Approximately three years prior to admission, episodes of syncope with cyanosis began. The first cardiac catheterization was unsuccessful because sino-auricular block and a sinus tachycardia developed. Catheterization findings later were consistent with an atrial septal defect.

Physical examination revealed marked underdevelopment with mild cyanosis at rest which increased on exercise. The anteroposterior diameter of the chest was increased. A thrill was palpable over the entire precordial area and a right ventricular heave was present at the left of the sternum. A grade III harsh systolic murmur was heard over the entire precordium but was most prominent in the area of the third left intercostal space. The pulmonic second

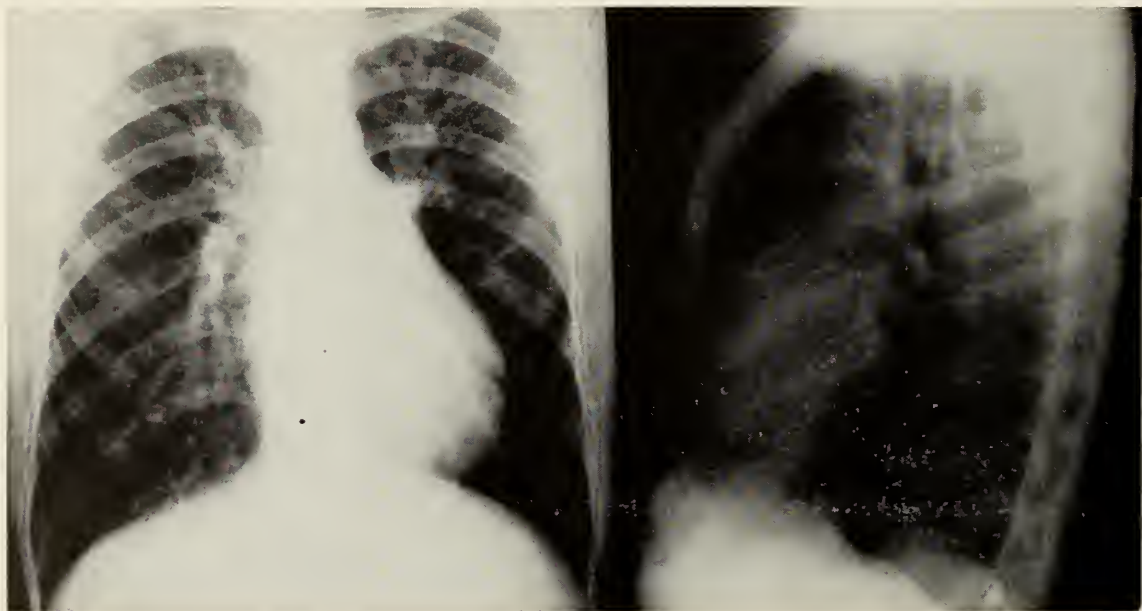


Figure 4

*Case III. Total anomalous right lung venous drainage with atrial septal defect.*

*PA and lateral chest films which show increased vascularity of the lung fields, right ventricular enlargement, and a markedly enlarged pulmonary artery.*



Figure 5

Case IV. Severe pulmonic valvular stenosis.

PA and oblique films of the chest showing slight enlargement of the pulmonary artery (post-stenotic dilatation) and right ventricular hypertrophy.

sound was markedly accentuated and greater than the aortic second sound. ECG showed right ventricular hypertrophy. Chest fluoroscopy and x-ray films revealed increased vascularity of the lung fields, right ventricular enlargement and a markedly enlarged main pulmonary artery with hilar pulsations (Figure 4).

A right lateral thoracotomy provided access to the heart. Total cardiopulmonary bypass for 34 minutes permitted surgical closure of an interatrial septal defect measuring 3 x 2 cm. with correction of anomalous drainage of the entire right lung. Both the right inferior and superior veins from the right lung entered the right atrium laterally instead of the left atrium in the normal manner. An Ivalon plastic prosthesis was sutured in such a manner as to shunt the blood from the right lung into the left atrium with a tunnel effect so as not to compromise the entrance of the superior and inferior vena cava or coronary sinus.

Recovery following the operation was rapid. He was discharged pink and asymptomatic on the 8th postoperative day. Visits to the Heart Clinic nine months following operation revealed that he had gained approximately 24 lbs. and the markedly underdeveloped musculature prior to operation had increased to normal. No significant murmur was heard.

Case IV: Severe pulmonic valvular stenosis.

A 13 year old white female with a heart murmur since the age of 7 years was asymptomatic until 1½ years prior to admission when exertional dyspnea and mild intermittent substernal chest pain began. X-rays and cardiac fluoroscopy revealed mild right ventricular enlargement and decreased pulmonary vasculature (Figure 5). ECG showed marked right ventricular hypertrophy and a systolic overload pattern.

Physical examination revealed slight obesity. Blood pressure was 120/80. Physical findings included a prominent right ventricular heave and a systolic pul-



Figure 6

Case V. Large atrial septal defect with severe congestive failure.

PA and oblique films of the chest showing marked enlargement of the pulmonary artery, pulmonary congestion, and marked right ventricular enlargement.

monic thrill. Auscultation revealed sinus arrhythmia with a rate of 90 per minute. A grade IV coarse systolic murmur was best heard in the pulmonic area and transmitted towards the left shoulder.

Cardiac catheterization revealed a right ventricular pressure of 190 mm. Hg., more than six times the normal pressure and one of the highest pressures ever encountered in our laboratory or other laboratories.

On March 15, 1960 through a median sternotomy severe valvular pulmonary stenosis was corrected by incising the three commissures. The right ventricle was markedly thickened. The postoperative recovery was rapid. The patient was discharged on the 10th postoperative day asymptomatic.

*Case V: Large atrial septal defect with severe congestive failure.*

A 35 year old white female with history of a heart murmur since the age of 6 years was hospitalized for congestive failure and digitalized for two years prior to admission to the Medical College Hospital. Cardiac catheterization at that time at the University of Minnesota Hospital indicated a large atrial septal defect with a marked left to right shunt. The patient had severe exertional dyspnea, orthopnea, paroxysmal nocturnal dyspnea, intermittent sharp substernal pain, and ankle edema despite digitalis and diuretics.

Blood pressure was 110/70. The pulmonic second sound was markedly accentuated and there was a grade III harsh systolic murmur in the third left intercostal space. X-rays and fluoroscopy revealed an enlargement of the right ventricle, pulmonary artery, and increased vascularity of the lung fields (Figure 6).

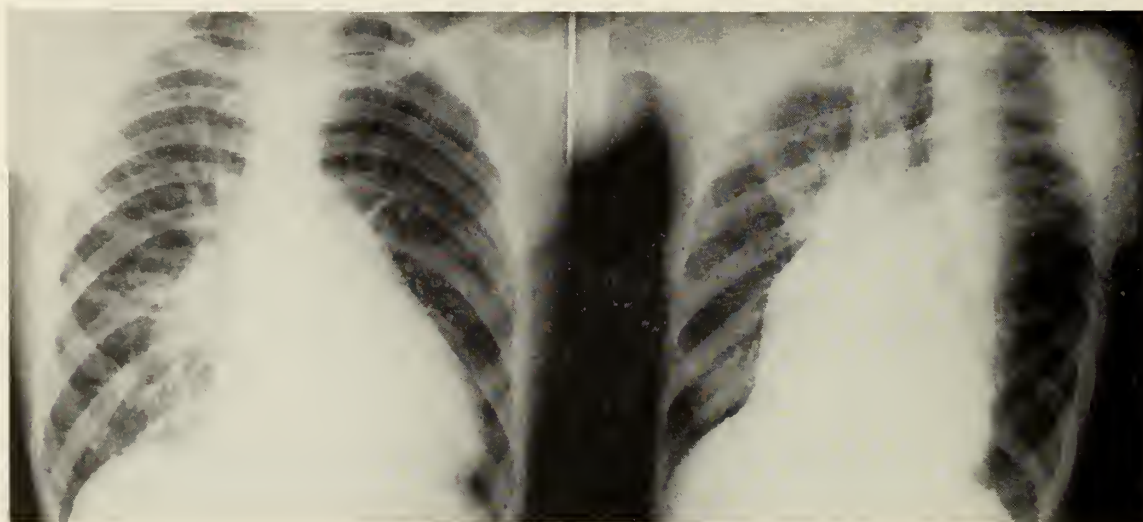


Figure 7

*Case VI. Mitral insufficiency with ostium primum defect.*

*PA and oblique chest films showing marked enlargement of the pulmonary artery, hypoplasia of the aorta, and biventricular enlargement.*

ECG showed right ventricular hypertrophy with a first degree heart block.

By cardiopulmonary bypass via median sternotomy with right atriotomy a large (6 x 4 cm.) atrial septal

defect was closed with an Ivalon prosthesis. Deliberate hypothermia was utilized to maintain the temperature at 33° C. during the course of total perfusion to decrease coronary sinus return. The total time of bypass was 30 minutes. Bilateral basilar pneumonitis responded to tracheal catheterization, antibiotics and other supportive measures. The patient was discharged on the 14th postoperative day, slowly improved thereafter and became asymptomatic six months after discharge. Recently she went ahead with a long postponed marriage and remains asymptomatic.

*Case VI: Mitral insufficiency with ostium primum defect.*

A 20 year old Negro male was admitted to the Medical College Hospital on April 14, 1960 with a diagnosis of mitral insufficiency. He had a severe febrile illness at the age of 18 months which was attributed to rheumatic fever. Frequent upper and lower respiratory infections occurred during childhood. A heart murmur was first noted during a selective service examination. Dyspnea on exertion which began in childhood progressed rapidly during the few years prior to admission.

Physical examination showed atrophy and weakness of the left shoulder girdle and upper extremity, moderate cardiomegaly to percussion and an associated grade III apical systolic murmur which radiated to the left axilla. A soft rumbling diastolic murmur was heard at the apex.

Chest x-rays and cardiac fluoroscopy revealed increased vascularity of the lung fields, marked en-

largement and increased pulsation of the pulmonary artery, hypoplasia of the aorta, and biventricular enlargement (Figure 7). An ECG revealed first degree AV block, "P" mitrale, right ventricular hypertrophy



with a systolic overload pattern. Cardiac catheterization revealed an increase in the oxygen saturation between the superior vena cava and right atrium, suggesting an interatrial septal defect, probably of the ostium primum type with mitral insufficiency due to a cleft mitral valve.

On April 19, 1960 with cardiopulmonary bypass the mitral insufficiency was corrected by repair of a cleft mitral valve and a large interatrial septal defect was closed with a Teflon patch. Although complete heart block was feared due to the close proximity of the sutures, it never developed. Postoperatively retained bronchial secretions slowly cleared with repeated tracheal aspirations. The patient was discharged on the 17th postoperative day afebrile and asymptomatic.

*Case VII: Interventricular septal defect with severe pulmonary hypertension.*

A 5 year old white male was admitted to the Medical College Hospital on May 12, 1960. He was born approximately two months prematurely. At the age of six weeks an incarcerated umbilical hernia was repaired and the heart murmur was first noted. Hospitalization was necessary 15 times for severe respiratory infections probably due to congestive failure. Three months prior to admission he was noted to be fatigable.

Physical examination revealed a small, pale, poorly developed child. The PMI was located in the fifth intercostal space at the left anterior axillary line. A systolic thrill was palpable in the second left intercostal space. There was a harsh grade III systolic murmur over the entire precordium but maximum in the second left intercostal space. The pulmonic second sound was accentuated.

The ECG showed right ventricular hypertrophy. Cardiac fluoroscopy and x-rays revealed right ventricular enlargement, increased pulsation of the pul-

monary artery and increased vascularity of both lung fields (Figure 8).

Cardiac catheterization showed a marked jump in the oxygen saturation between the right atrium and right ventricle with right ventricular and pulmonary artery hypertension as high as 75 mm. Hg.

Laboratory studies were normal. On May 17, 1960 under general endotracheal anesthesia utilizing cardiopulmonary bypass he underwent repair of the septal defect with severe pulmonary hypertension. During operation the patient was deliberately cooled to 33° C. and then gradually rewarmed by the use of the Brown heat exchanger. Total perfusion time was approximately one hour. The initial postoperative course was complicated by fever due to retained tracheobronchial secretions which responded to tracheal aspiration.

On the fourth postoperative day severe abdominal pain with upper abdominal tenderness and mild rebound tenderness in the upper abdominal quadrants was attributed to a recurrent umbilical hernia. The pain rapidly subsided and he was discharged asymptomatic on the 15th postoperative day.

*Summary*

Heretofore inoperable intracardiac defects can now be safely corrected by means of cardiopulmonary bypass and hypothermia. Undoubtedly many defects not listed in the enclosed table will soon come within the province of open heart surgery. A new technique recently described by Drew whereby the patient is cooled by double pumps utilizing the patient's lungs will permit the performance of these operations with less blood. The circulation with this technique can be completely stopped near 0° C. for as long as one hour



*Figure 8*

*Case VII. Interventricular septal defect with severe pulmonary hypertension.*

*PA and oblique films of chest showing marked pulmonary congestion, enlargement of pulmonary artery, and right ventricular hypertrophy.*

which permits the correction of even the most complex defects with an absolute bloodless and motionless operative field. A brief description of illustrative cases operated on at the Medical College Hospital with cardiopulmonary by-

pass and hypothermia are presented herein. Since new techniques and developments constantly are being brought within the realm of clinical application, the future of open heart surgery seems bright indeed.

#### REFERENCES

1. Aldinger, E. E., Darby, T. D., and Thrower, W. B.: Effects of Tris (Hydroxymethyl) aminomethane (THAM) on acid-base derangements and ventricular contractile force changes elicited by periods of reduced circulating blood volume. *Fed. Proc.* 19:102, 1960.
2. Clowes, G. H. A., Jr. and Neville, W. E.: Membranes oxygenator. In Garrott, A. J. *Extracorporeal Circulation* 544 pp. Springfield, Illinois, Thomas, 1958, pp 81-100.
3. Darby, T. D., Aldinger, E. E., Gadsden, R. H., and Thrower, W. B.: Effects of metabolic acidosis on the ventricular isometric systolic tension and the response to epinephrine and levarterenol. *Circulation Research* 8:1242, November 1960.
4. Dennis, C. et al.: Development of pump-oxygenator to replace heart and lungs: apparatus applicable to human patients, and application to one case. *Ann. Surg.* 134:709, 1951.
5. DeWall, R. A., Warden, H. E., Gott, V. L., Read, R. C., Varco, R. L., and Lillehei, C. W.: Total body perfusion for open cardiectomy utilizing the bubble oxygenator: physiologic responses in man. *J. Thoracic Surg.* 32:591, 1956.
6. DeWall, R. A., Warden, H. E., Read, R. C., Gott, V. L., Lillehei, C. W., and Varco, R. L.: A simple expendable, artificial oxygenator for open heart surgery. *S. Clin. North America* 36:1025, 1956.
7. Drew, C. E.: Profound hypothermia in cardiac surgery. Report of three cases. *The Lancet*, V. 1:748, 1959.
8. Gross, Robert E.: Open-heart surgery for repair of congenital defects. *New England J. Med.* 260: 1047, 1959.
9. Kirklin, J. W. et al.: Studies in extracorporeal circulation. I. Applicability of Gibbon-type pump-oxygenator to human intracardiac surgery: 40 cases. *Ann. Surg.* 144:2, 1956.
10. Lillehei, C. W., DeWall, R. A., Read, R. C., Warden, H. E., and Varco, R. L.: Direct vision intracardiac surgery in man using a simple, disposable artificial oxygenator. *Dis. Chest* 29:1, 1956.
11. Miller, B. J., Gibbon, J. H., Jr., and Gibbon, M. H.: Recent advances in development of mechanical heart and lung apparatus. *Ann. Surg.* 134:694, 1951.

(Continued on page 146)

## MEDICAL COLLEGE CLINICS

### THE MEDICAL COLLEGE OF SOUTH CAROLINA

#### ELECTROCARDIOGRAM OF THE MONTH

##### Acute Myocarditis

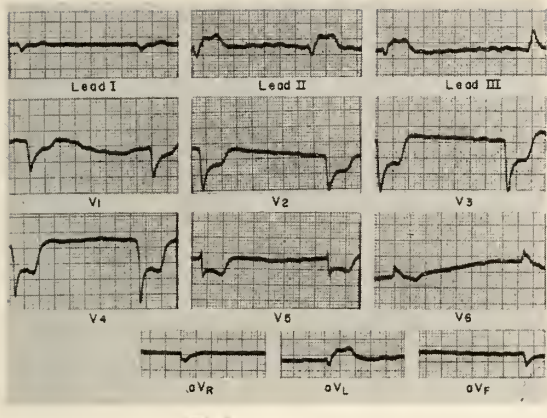
DALE GROOM  
Department of Medicine

*Case Record*—This unusual electrocardiogram was recorded a few hours before death of a 75 year old gentleman who had been admitted to the hospital for treatment of a respiratory infection. He was known to have had atrial fibrillation for which he had taken digitalis, but apparently had been reasonably well and active until five days before his death, when he became ill with a sore throat, cough, and fever, said to have been treated at home with antibiotics. When after several days he failed to improve he was admitted to the hospital. A diagnosis of a viral respiratory infection was borne out by a fever of 100-101°, normal white blood cell and differential counts, and several small densities in the chest roentgenogram interpreted as areas of pneumonitis of the right lower lobe.

On the day following admission his pulse rate

dropped abruptly to 40 beats per minute, he became cyanotic and his blood pressure declined to shock levels. Therapy with intravenous nor-epinephrine restored the blood pressure to normal but the bradycardia remained unchanged. Subsequently he had several episodes of loss of consciousness and convulsions (Stokes-Adams attacks) successfully terminated by sharp blows on the chest to restore cardiac action. During one of these he died.

At autopsy it was first believed that a 3x4 cm. area of softening and discoloration on the postero-lateral surface of the heart represented an acute infarction of the left ventricle. The coronary arteries, however, were found to be remarkably smooth and pliable with no significant atheromatous narrowing and no thrombosis or occlusion demonstrable on careful dissection. Microscopic sections from the softened area disclosed no infarction but rather a severe myocarditis with interstitial infiltration of inflammatory cells: polymorphonuclear leucocytes, lymphocytes, macrophages and a predominance of eosinophils. Sections from other sites showed diffuse inflammatory involvement confined to the myocardium. Final autopsy diagnosis was acute myocarditis.



**Electrocardiogram** — No P waves are present — only the rapid and irregular undulations of the base line (the so-called “F waves”) typical of atrial fibrillation. The QRS complexes which occur at a fairly regular rate of 38 are wide and bizarre, denoting an idioventricular rhythm. With the exception of one complex which follows an unusually long pause in lead III, all of them seemingly arise from a single ventricular focus and their amplitude is somewhat less than usual for ventricular ectopic complexes. While some degree of S-T segment displacement is common in such beats, the 5-10 mm. depressions seen here in the precordial leads are extraordinary, suggesting acute injury, most likely infarction.

As in the presence of bundle branch block, accurate localization of the site of injury is difficult but the fact that the S-T segments are depressed below the baseline in the chest leads would suggest that functioning muscle tissue intervenes between the electrode and the damaged area which therefore would be on the posterior wall.

**Discussion** — This unusual electrocardiogram is selected not as a representative picture of myocarditis (for of course no ECG abnormalities can be regarded as specific for inflammation) but to point up the fact that such diffuse inflammatory involvement can and often does have a remarkably focal distribution as well — anatomically and electrically. So extensive was the destruction of the posterior wall in this case that an acute posterior myocardial infarction was diagnosed electrocardiographically and also at the autopsy table. Not until the microscopic sections were examined was it appreciated that the focal lesion was one of acute inflammation rather than simple ischemic necrosis. Then, unfortunately, the opportunity to recover and identify the infectious agent was past.

Presumably this was a case of viral myocarditis. That diagnosis, admittedly unproved, is based mainly upon the antecedent respiratory infection with fever, pneumonitis and a normal leucocyte count, plus the selective involvement of the myocardium with an apparently non-bacterial inflammation. The predominance of eosinophils in the infiltrate raises the question of a possible hypersensitivity reaction; al-

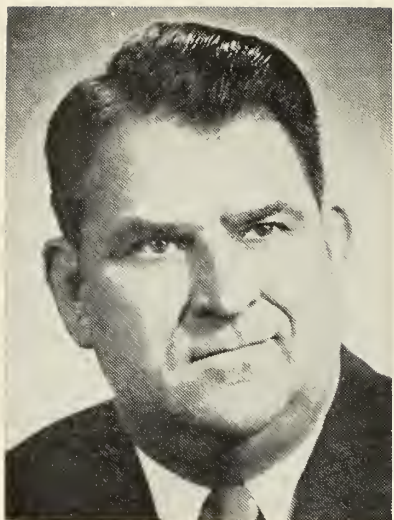
lergic myocarditis has been described as a consequence of hypersensitivity to certain drugs, notably antibiotics, but there was no clinical indication of an allergic response, no eosinophils in the peripheral blood nor did they predominate in the lungs or other tissues examined. Interstitial infiltrations of histiocytes, lymphocytes and eosinophilic or neutrophilic polymorphonuclear leucocytes are commonly found in viral myocarditis and are especially prevalent in areas of degeneration and necrosis of the muscle cells. Inasmuch as no coronary occlusion or infarction was demonstrable, most likely the very marked S-T abnormalities arose from this inflammatory damage to the posterior wall.

Complete AV block in the presence of atrial fibrillation is rare and constitutes an exception to the rule that the pulse is grossly irregular when the atria are fibrillating. Either the node or the ventricles must take over the pace-making function to sustain life, and in this case it was the latter as shown by the ectopic type of ventricular complexes at the rate of about 40, characteristic of an idioventricular rhythm. Evidently that was not sufficient to maintain adequate circulation, was interrupted with periods of asystole and ultimately failed. Cause of the atrio-ventricular block is uncertain. However, the inflammatory involvement was sufficiently diffuse to account for almost any ECG changes and furthermore conduction defects are frequently associated with acute myocarditis (indeed, the conduction system is notoriously vulnerable) as are abnormalities of the S-T segment and the T waves.

Careful autopsy studies of the cases dying of virus pneumonia have shown about a 10% incidence of myocarditis. Even higher figures have been reported for poliomyelitis and especially among the fatalities due to several strains of Cocksackie virus. Acute myocarditis has also been described as a component of infectious hepatitis, influenza, mumps, encephalitis (the “EMC” virus identified with encephalomyocarditis), chicken-pox, small pox, psittacosis, yellow fever and even measles. Reports of somewhat higher occurrence rates of electrocardiographic alterations in many of these diseases are subject to the error in distinguishing ECG changes due to fever, electrolyte and autonomic disturbances accompanying the illnesses from those due to inflammation of the heart muscle itself. Probably most viral infections of the myocardium leave little or no residua but it has been suggested that many of the areas of fibrosis and scarring for which the pathologist can find no cause may be the result of unrecognized viral inflammation.

Of interest in passing is the fact that a generation or so ago nearly all diseases of the myocardium were classified as myocarditis. Then as coronary heart disease came into its own, the diagnosis was rarely heard except in connection with rheumatic fever. Now myocarditis — meaning actual inflammation of the myocardium — is beginning to emerge as a fairly common component of many infectious diseases, including those due to bacteria, protozoa and fungi. So the pendulum swings.





## President's Pages

The following Editorial appeared in the November 1960 *World Medical Journal*. Leo E. Brown—Director, Communications Division A. M. A. was guest Editor:

Some people tend to believe that there is something mysterious about public relations — that it involves a peculiar kind of sleight-of-hand and can be utilized effectively only by a few skilled experts experienced in shaping public opinion.

This simply is not true. The foundation stones of public relations are the policies which govern an organization's actions, and its building blocks are the actions themselves. Communicating these policies and actions to

the general public is the responsibility of the public relations executive, but he must also assume the responsibility of interpreting and implementing these policies. He can define an association's policies and if necessary defend it but he cannot create or bestow a character that is not there.

Recently the term "Image" has been substituted in many quarters for "public relations". In my opinion the terms are synonymous. The image or public relations of the medical profession is simply the "mind's eye" interpretation of the medical profession as reflected in the mirror of public opinion. This image can be real or imaginary, depending upon the authenticity of the facts used to formulate an opinion.

Many physicians still feel that the medical profession can do and say what it pleases and somehow public relations can make it acceptable. Nothing could be farther from the truth. Public relations is common sense. Good deeds and their proper interpretation are the fundamental precepts of effective public relations.

Dr. E. Vincent Askey, our American Medical Association president, has said:

"It is not enough for the individual physician to give tacit support to the efforts of his local and state societies, or to those of the American Medical Association. He must be more than a dues-payer if he wishes to preserve medicine's freedom to practice in its traditional way.

"He must be the articulate voice of his profession, wherever he is. He must be dedicated to the well-being of his community. In matters of health, he must be willing to assume responsibility and discharge it like the expert he is. He must be citizen as well as doctor, plaintiff's attorney for his patients, missionary for the individual and for the individual's rights.

"The image of medicine is simply an extended likeness of the physician and his colleagues, reflected in the mirror of public opinion. It can be warm and sympathetic, or cold and impersonal.

"Actions speak louder than words; and words are without value unless they are backed up by deeds. The image of our profession is the reflection of our substance and not our shadow."

- - - most of us agree with Dr. Askey. We know that medicine traditionally has been reluctant to tell its story. It has felt that good deeds are in themselves sufficient evidence of its competency and humanitarianism.

The good deeds were not enough.

Medicine's communication system broke down. There were many eager receivers but no one was sending the message.

Fortunately, this attitude has changed and we find the medical profession becoming increasingly public relations-minded. This is necessary and all to the good.

But it doesn't mean that we can solve our problems over-night by waving a magic wand. The solutions can be found only by hard, sustained work.

For example, one of medicine's greatest weaknesses is that all too often there is more agreement among doctors on how medicine should *not* be thought of by the public than how it *should* be thought of.

The biggest question is what we are *for*, not what we are against. Effective medical public relations can no longer be viewed solely as a preventive or holding operation, but as a creative, organized activity to strengthen the future of medicine.

This is a big, important job. Working together, we are getting it done.

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## Editorials

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### THE SHIP OF CLINICAL MEDICINE

Do not give up the ship of clinical medicine in the face of high seas and overpowering waves of scientific research. Keep hand on helm, steer into the teeth of the multitudinous machinations of investigators using the most frightening formulas for expressing the probably simple truths of biochemistry and biophysics. Our journals are weighted with what are undoubtedly erudite and most valuable studies on problems which seem remote from those of the practicing physician. And it is the exceptional mind that is able to master what most of us simply look at for a moment, and gasping at another's knowledge and at our own abysmal ignorance, turn rapidly to something else more in keeping with our own stature and attainments. We quail, literally quail at but with admiration for the intellect of those who from such formulas as " $E=b(P - c)a$ " and the like, conclude that "At a constant initial pressure, the visco-elastic properties of the eye are closely simulated by a rheologic model" whatever that is.

We are not deriding these articles, dear reader, we are in deadly earnest in our thoroughgoing approval of the time, energy, and capital expended in the advancement of knowledge along all fronts. What we are trying to say is that studies of this kind were simply not done for us, and we are done for if we have to understand them to survive. We wish we could understand them, but we just did not grow up that way. Nevertheless all is not lost. There are definite indications from a

few wise men in ivory towers and a few simple ones in lowly small places that there must be a marriage between pure science and clinical medicine that both may continue. It may work. At least at this time both parties to such a contract appear to be willing.

The sea is all around the ship, but so long as there are no holes in head or hull she will float upon it. So keep hand on helm, mates, cock an eye to the sky, another at the horizon, and thank heaven the sun will soon be over the yard-arm.

J. W. Jervey, Jr.

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### THE EASTER SEAL SOCIETY

This is a short name by which the Crippled Children Society of South Carolina, Inc. is generally known, since its activity in raising funds is accomplished in the annual Easter Seal sale. It is a society which has been active over the nation and over South Carolina for many years, and which has built up an impressive record of accomplishment.

Funds raised from the sale of seals are used with an extraordinarily low administrative cost and a record low campaign cost to provide services to the great number of children who are handicapped. Actually the range extends beyond the "children" in the usual sense, since many adults are also beneficiaries of the services of the Society.

Last year Easter Seals aided 3,467 crippled South Carolinians of whom 2,672 were children and 795 were adults who received services through cerebral palsy clinics, physical,

occupational or speech therapy, medical or surgical care, home-bound or hospital teaching, the Easter Seal family camp, orthopedic aid, orthopedic appliances such as crutches, wheel chairs, braces or artificial limbs.

In addition to these direct services, special training and education have been given through seminars, workshops, scholarships and fellowships to 2,844 South Carolina teachers, therapists, nurses, doctors, and other professional persons.

The National Society contributes considerable funds to research, and in South Carolina itself, more than \$30,000 has been made available for special research at the Medical College of South Carolina.

Recently some of the volunteer societies have come under close scrutiny because of the dereliction of a few of these organizations in the matter of expenditure of funds. The Crippled Children Society has never been questioned as to its economic, wise, and effective utilization of funds which it raises from contributions. As noted above, it is tops in economy of campaign costs and in the administrative field. It is backed by a Board which has shown intense interest in its activities and complete satisfaction with its procedures. The Professional Advisory Committee is headed by Mr. A. L. M. Wiggins of Hartsville, and includes representatives from the State Medical Association, Dental Association, Board of Health, Department of Education, Vocational Rehabilitation Department, and the Department of Public Welfare. In addition, there is a Medical Advisory Board appointed by the South Carolina Medical Association, which consists of fifteen physicians from various parts of the state who are interested in the work and who meet periodically to review the activities of the Society and to make any suggestions which seem worthwhile.

The Easter Seal fund-raising period is here, and physicians of the state are urged to lend their support personally and professionally to this very worthwhile effort.

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### **A.M.A. RECOMMENDATIONS FOR STATE AND COUNTY MEDICAL SOCIETIES**

1. All State and County Medical Societies

should recommend names of qualified physicians for the various Councils and Committees of the American Medical Association. Such names, with a short biographical sketch, should be sent to Dr. Blasingame of the Headquarters office. States should publicize this information for the benefit of all physicians.

2. It is recommended that all constituent and component medical societies should consider developing liaison committees of state associations and county societies; that they be given increased responsibilities for exchange information and liaison; and that they be available equally to all legally constituted prepayment and/or insurance plans which do business in their respective areas.

3. It is recommended that all state associations bring to the attention of their members the suggestion for improvement in Veteran's Hometown Care, Free Choice Veterans Care, Non-service Connected Admission Policies and State Association Action. It is further recommended that the public be informed of these policies.

4. All component medical societies should take an active interest in (a) Assistance Programs; (b) the whole complex of welfare medical care; (c) possible future developments.

5. All constituent medical associations should undertake a study of the need and desirability of establishing committees to assure the rendition of good medical care, to eradicate abuses of voluntary health insurance benefits, and to provide methods for the resolution of problems which arise in the provision of medical care to the public. Such action will identify the medical profession even more closely with its concern for the quality and cost of medical care and the utilization of benefits provided through voluntary health insurance mechanism.

6. The House of Delegates directed the Board of Trustees and the Council on Medical Service to assume immediately the leadership in consolidating the efforts of the American Medical Association with those of the National Association of Blue Shield Plans, the American Hospital Association, and the Blue Cross Association into maximum development of the voluntary non-profit prepayment concept to provide health care for the American people.



Similar leadership should be undertaken to coordinate the efforts of private insurance carriers through conferences with their national organizations. Where feasible efforts should be made to cooperate with other types of medical care plans, other professional groups and representatives of industry, labor, and public at large.

7. Constituent associations should make every effort to effect the transfer of all professional services possible from Blue Cross Plans and all other hospital plans to Blue Shield or that section of insurance plans providing for professional services wherever such situations exist.

8. The House of Delegates encourages the state and local medical societies to promote High School Scholarship Award programs in their respective areas.

9. All state associations should cooperate with the appropriate state officials and provide leadership in implementing the provisions of the Kerr-Mills Bill.

10. State associations should nominate interested and experienced physicians for the position of "key man". This is the key man in state legislative affairs. The Woman's Auxiliary should be encouraged in their effective campaign assisting physicians.

11. State and county associations and societies shall participate in the promotion and publicizing of the scholarship and loan program proposed by the special study committee of the Council on Medical Education and Hospitals. The program will clearly assist in securing highly talented individuals whose ability and leadership in all areas of medicine will be fostered and at the same time will bring needed financial assistance on a broad basis to medical students under a system in keeping with the association's belief in individual responsibility.

12. Expansion of membership in the A. M. A. by state and county medical societies is important. We must actively seek to add all those currently outside our ranks so that we may truly represent the strongest, most united front possible as we face our responsibilities to the American people.

The Judicial Council has said many times and repeats here for emphasis: "The local

medical society is the strong right arm of the medical profession. As it demands of its members respect for medicine's principles of ethics and as it demonstrates that its members are of high ethical stature, the public will respect and admire the profession of medicine and its members. If the county societies fail to require adherence to ethical principles, public admiration and respect for the medical profession will be lessened."

George Dean Johnson, M. D.

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### ET CETERA

We are informed by a reliable source that the drug Retieulose, which has been promoted as an inhibitor of viral activity, seems to have no demonstrable value. The published observations which have given rise to the claim of potency appear to be uncontrolled and not reliable. The claims which have been made for beneficial effects in a variety of illnesses ranging from herpes simplex to viral encephalitis appear to be without foundation.

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Some of our members will be glad to learn that the Ocean Forest Hotel at Myrtle Beach is to continue in its usual capacity. The plans for conversion into a residential hotel for the aged did not reach conclusion, and the hotel will be available for convention purposes again.

Many of the members have felt that Myrtle Beach is a good meeting place since it is "away from home" for nearly everybody concerned. Others feel that a rotation of meeting place is better in that it keeps the membership in closer contact with medical affairs in the larger cities.

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The current fad for feeding infants just as soon as they are able to swallow strained foods received some discouragement in a discussion on nutrition recently held at Charleston. Dr. Youmans pointed out that people who sustain themselves on a low diet from early life achieved maturation more slowly and were slated for longer life. Perhaps this thought will move the initiation of feeding to a more reasonable age in infancy.



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sustains  
retains*

*extra  
antibiotic  
activity*

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levels promptly

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levels evenly

**DECLOMYCIN** Demethylchlortetracycline sustains — through the entire therapeutic course, the high activity levels needed to control the primary infection and to check secondary infection at the original—or another—site. This combined action is usually sustained without the pronounced hour-to-hour, dose-to-dose, peak-and-valley fluctuations which characterize other tetracyclines.

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DECLOMYCIN—SUSTAINED ACTIVITY LEVELS

OTHER TETRACYCLINES—PEAKS AND VALLEYS

POSITIVE ANTIBACTERIAL ACTION

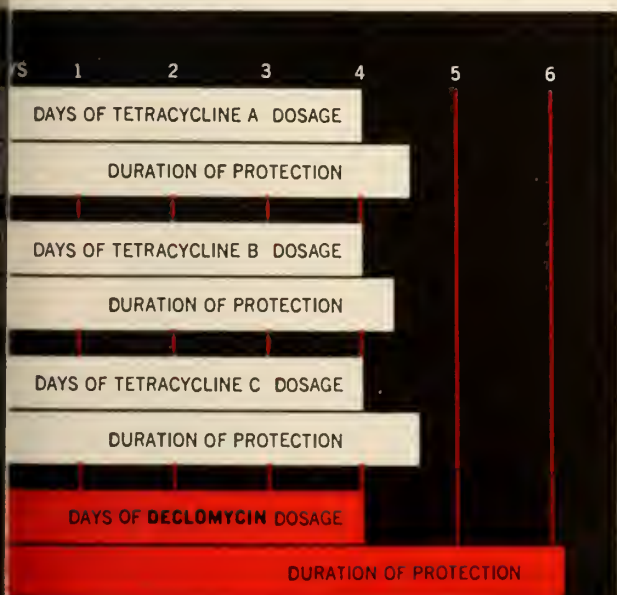
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**CAPSULES**, 150 mg., bottles of 16 and 100. **Dosage:** Average infections—1 capsule four times daily. Severe infections—Initial dose of 2 capsules, then 1 capsule every six hours.

**PEDIATRIC DROPS**, 60 mg./cc. in 10 cc. bottle with calibrated, plastic dropper. **Dosage:** 1 to 2 drops (3 to 6 mg.) per pound body weight per day—divided into 4 doses.

**SYRUP**, 75 mg./5 cc. teaspoonful (cherry-flavored), bottles of 2 and 16 fl. oz. **Dosage:** 3 to 6 mg. per pound body weight per day—divided into 4 doses.

**PRECAUTIONS**—As with other antibiotics, DECLOMYCIN may occasionally give rise to glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis or dermatitis. A photodynamic reaction to sunlight has been observed in a few patients on DECLOMYCIN. Although reversible by discontinuing therapy, patients should avoid exposure to intense sunlight. If adverse reaction or idiosyncrasy occurs, discontinue medication.

Overgrowth of nonsusceptible organisms is a possibility with DECLOMYCIN, as with other antibiotics. The patient should be kept under constant observation.



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PROTECTION AGAINST RECURRENCE



# THE COUNCIL OF THE SOUTH CAROLINA MEDICAL ASSOCIATION

To refresh the memory of the members of the Association it might be said that the Council consists of one member from each of the nine districts of the state. These members are elected by the House of Delegates and together make up the body which is responsible largely for all of the affairs of the Association in the interim between annual meetings. The Council meets preceding the main program of the annual meeting and meets daily during the meeting. It meets at least once in the fall to consider budgets and other business which has come out of the annual meeting or developed in the interim. It is subject to call for special meetings at any time and it carries a very large share of the responsibility for the conduct of the Association.

At the time of the annual meetings, *The Journal* is usually graced with photographs and biographies of incoming officers. There is not usually much attention shown to the members of Council, some of whom have served long terms and rendered tremendous service to the Association. For this reason it has been thought worthwhile to present to the readers of this *Journal* the countenances and accomplishments of those members who make up the chief body of Council, with the thought that it may allow a certain amount of recognition of their devotion to duty and readiness to serve at all times.

Below we wish to present to you the current members of Council with brief biographical notice of their careers. No attempt is made to list all of the honors and accomplishments but only to attempt to indicate that the people who make up Council are substantial and loyal members of the medical profession.



JAMES H. GRESSETTE, M. D. of Orangeburg represents the Eighth District and is Chairman of Council. He was born in St. Matthews in 1913 and graduated from the Medical College of South Carolina in 1938. He served an internship at the Macon Hospital and was afterwards resident, and later associate in ophthalmology and otolaryngology at the Gill Memorial Hospital at Roanoke, Virginia. He is a licentiate of the Board of Ophthalmology and the Board of Otolaryngology, a member of the American College of Surgeons, the International College of Surgeons, and has served in numerous offices in the medical societies of the state. He has also taken an active part in community activities, having been president of the Orangeburg Chamber of Commerce, Director of the Industrial Development Company, of the Bank of Orangeburg, and of the Rotary Club, as well as Chairman of the Board of Deacons of the First Baptist Church.

DR. CLAY W. EVATT of the First District was born in Anderson County and attended the University of South Carolina, and graduated from the Medical College of Virginia in 1924. He did post-graduate work in Richmond, New York, Brooklyn and Chicago. He is associate professor of ophthalmology at the Medical College of South Carolina, Fellow of the American College of Surgeons, Fellow of the International College of Surgeons and Fellow of the College of Ophthalmology and Otolaryngology. Dr. Evatt served as vice president of the South Carolina Medical Association in 1959-1960. He is also president of the Charleston County Board of Health and has been past president of his state's specialty organization. He belongs to a great number of organizations and pursues an active interest in community and medical affairs. Dr. Evatt



practiced in Greenville for ten years. He was active in the medical and community matters there as he has been since his establishment in Charleston in 1935. He has published more than thirty medical papers. Dr. Evatt is a Captain in the Medical Reserve (retired), and a Veteran of World War I.



The Second District is represented by DR. ALFRED FLOURNOY BURNSIDE, who was born in 1897 at Lykesland, South Carolina. He received his A.B. degree from Wofford College, and graduated from the Medical College of South Carolina in 1923, thereafter serving an internship at the Columbia Hospital and a residency at the Baptist Hospital in Columbia. In later years he has served as Chief of Staff at the Columbia and Providence Hospital, Chief of Surgery at these hospitals and the Baptist Hospital. He has been a very active member of the Columbia Medical Society and has held many offices including the presidency.

Dr. Burnside has contributed a number of articles to medical literature. He has been a member of the Board of Trustees of the Medical College since 1931, and he is a member of the Southeastern Surgical College, and the American College of Surgeons, International College of Surgeons and the Southern Medical Association as well as of his local medical organizations.

DR. JOHN PARKS BOOKER of Walhalla represents the Fourth District. He is a native of Charlotte, North Carolina, but has long associated himself with this state in which he has many family ties. He attended Duke University and graduated from the Medical College of South Carolina in 1936. He served an internship at Baker Sanatorium and later at the Greenville General Hospital, remaining as a resident in surgery. During World War II he saw extended Army service abroad, entering as a First Lieutenant and being discharged as Lieutenant Colonel in 1946. Since then he has been promoted to Colonel and is assigned as Surgeon to the 108th Infantry Division Reserve. He is a member of several medical organizations and has taken an active part in civic and religious responsibilities, including the position of Mayor pro-tem on his town council. He has served several times as president of the Oconee Medical Society and has been Chief of Surgery and Chief of Staff of the Oconee Memorial Hospital.



JOHN M. BREWER, M. D. is a representative from the Fifth District. He was born and lives at Kershaw, and is a graduate of the University of North Carolina. He received his medical degree from the Medical College of South Carolina in 1931, thereafter serving an internship at Roper Hospital, The James Walker Memorial Hospital in Wilmington, and as Chief Resident at the Babies Hospital at Wrightsville, North Carolina. He has been practicing medicine and surgery in Kershaw since 1933, except for a term of four years in the Navy terminating in 1946. He served at Pensacola and also aboard the aircraft carrier *Midway* during World War II. He has been in

practice since 1946.

Dr. Brewer is a member of the Southeastern Surgical Congress, The American Medical Association and the Southern Medical Association. He is now serving his third year in this Council.



WILLIAM LOUIS PERRY, M. D., of the Sixth District, elected in 1959, was born January 4, 1912 in Chesterfield, S. C. He graduated from Chesterfield High School in 1929 and received his B.S. at Wake Forest, 1934; B.S., Medicine, Wake Forest 1936; and his M.D. at the Medical College of South Carolina in 1938. He was an intern at McLeod Infirmary, Florence, and has been in general practice in Chesterfield since 1940. He is Past President of Chesterfield County Medical Association and of the Pee Dee Medical Association.

DR. NORMAN EADDY of Sumter represents the Seventh District and is one of the new members of the Council. Born in Timmonsville in 1908, he attended the University of North Carolina, the College of Charleston, and the Medical College of South Carolina from which last he graduated in 1931. He was an intern at the U. S. Marine Hospital in San Francisco and did general practice in South Carolina from 1932-35, after which he did work in the field of eye, ear, nose and throat at the Brooklyn EENT Hospital and the Episcopal Eye and Ear Hospital in Washington. He practiced his specialty in Sumter except for interruption for war service, in which he spent four years and was discharged as Major from the Air Transport Command. He is a member of a number of medical societies in the state, a licentiate of the American Board of Ophthalmology, and a member of the Academy of Ophthalmology and Otolaryngology.



JOHN M. FLEMING, M. D., serving for the Ninth District, achieved his education at Clemson College and the Medical College of the State of South Carolina. He served as intern at St. Francis Infirmary, and later at Walter Reed General Hospital in Washington, then proceeded to residency in obstetrics and gynecology in the Columbia Hospital for Women, Washington, and afterward was Chief Resident Surgeon at the Garfield Memorial Hospital. During World War II he was Commander, U. S. Medical Corps Reserve.

He has held many responsible positions in Spartanburg — Chief of Obstetrics and Gynecology at the Spartanburg General Hospital,

Director of Spartanburg Cancer Clinic, member of the Executive Committee of the American Cancer Society for South Carolina, and holds staff positions in other hospitals. He has been a member of the various state organizations which pertain to his specialty and is a former president of the South Carolina Obstetrical and Gynecological Society. He is a diplomate of the American Board of Obstetrics and Gynecology and state chairman of the American College of Obstetrics and Gynecology. He has participated in many civic activities.

DR. C. J. SCURRY of Greenwood represents the Third District. He was born in Laurens county in 1894, received his degree in medicine from Emory University in 1916 and served internship and residency at St. John's Hospital in Pittsburgh. He was with the American Expeditionary Forces for 13 months and has practiced medicine and general surgery in Greenwood since the latter part of 1919. He is a member of the American College of Surgeons, the International College of Surgeons, and the Southeastern Surgical Association.



Besides these members, Council also includes the following:

1. The current president of the Association, Dr. Joseph P. Cain
2. The vice president of the Association, Dr. B. J. Workman
3. The secretary, Dr. Robert Wilson, Jr.
4. The treasurer, Dr. Howard Stokes
5. The president elect, Dr. Charles N. Wyatt
6. The past president, Dr. William Weston, Jr.
7. The president of the South Carolina Medical Care Plan, Dr. George Dean Johnson
8. The delegates to the A.M.A., represented by Dr. George Dean Johnson and Dr. William Weston, Jr.
9. The executive secretary, Mr. M. L. Meadors
10. The editor, Dr. Joseph I. Waring

The last two are in attendance but do not vote.

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## PRELIMINARY PROGRAM

### SOUTH CAROLINA MEDICAL ASSOCIATION

#### SCIENTIFIC SESSION

#### CHARLESTON, APRIL 26 AND 27, 1961

#### WEDNESDAY AFTERNOON: APRIL 26

Presiding: Dr. J. P. Cain, President, S. C. M. A.

- 2:30 to 2:50 p. m.    **HEAD INJURIES**  
Dr. Frank F. Espey, Neurosurgeon, Greenville, South Carolina  
A discussion of the immediate care of acute head injuries, illustrated by lantern slides. Copies of this paper will be available.
- 2:50 to 3:20 p. m.    **PEPTIC ULCER**  
Dr. Ross Pierpont, Chief of Surgery, Maryland General Hospital, Baltimore, Maryland  
A broad discussion of ulcers of the stomach and duodenum which will include the surgical aspects of the problem.
- 3:20 to 3:40 p. m.    **ACUTE CORONARY INSUFFICIENCY**  
S. C. Heart Association Lecture—in honor of Mr. E. B. Grier, deceased, Greenville, South Carolina  
Dr. Peter Gazes, Associate Professor of Medicine, Medical College of South Carolina  
Dr. Gazes will present the clinical and electrocardiographic picture of this syndrome with particular emphasis on the "Master two-step test".
- 3:40 to 4:00 p. m.    **NON OPAQUE FOREIGN BODY BRONCHIECTASIS**  
Dr. Wendell Thrower, Assistant Professor of Thoracic & Cardiovascular Surgery, Charleston, South Carolina  
Case reports and discussion of problem cases of pulmonary infection, determined to be caused by unsuspected foreign bodies which are not visible on routine x-ray examination.
- 4:00 to 5:00 p. m.    **JAUNDICE — A PANEL DISCUSSION**  
Dr. C. W. Legerton, Jr., Charleston, South Carolina, Moderator — Gastroenterology  
Dr. Ross Pierpont, Baltimore, Maryland — Surgery  
Dr. Harold Pettit, Charleston, South Carolina — Radiology  
Dr. C. W. Delia, Conway, South Carolina — Clinical Pathology  
Dr. Hugh H. Dubose, Columbia, South Carolina — Internal Medicine  
The ever perplexing problem of obstructive versus non-obstructive jaundice. The interpretation of laboratory tests, x-ray findings, and the medical and surgical care of these patients.

#### THURSDAY MORNING: APRIL 27

Presiding: Dr. J. P. Cain, President, S. C. M. A.

- 9:30 to 10:00 a. m.    **BREAST MALIGNANCY — TREATMENT AFTER SURGERY**  
Dr. James F. Newsome, Assistant Professor of Surgery, University of North Carolina  
Dr. Newsome is director of the tumor clinic and will discuss hormonology of cancer and its growth.

- 10:00 to 10:10 a. m. DISCUSSION  
Dr. John C. Hawk, Jr., Assistant Professor of Surgery, Medical College of South Carolina
- 10:10 to 10:40 a. m. PHYSIOLOGIC CHANGES AT BIRTH  
Dr. Herbert S. Harned, Assistant Professor of Pediatrics, University of North Carolina  
Dr. Harned will discuss the immediate changes, chiefly respiratory and circulatory, in the newborn with emphasis on immediate care of the newborn.
- 10:40 to 10:50 a. m. DISCUSSION  
Dr. Walter M. Hart, Florence, S. C.
- 10:50 to 11:20 a. m. MANAGEMENT OF ACUTE RENAL INSUFFICIENCY  
Dr. William B. Blythe, Department of Medicine, University of North Carolina  
Dr. Blythe will cover renal physiology and disease with emphasis on chemical (drug) poisoning, transfusion, et cetera.
- 11:20 to 11:30 a. m. DISCUSSION  
Dr. Arthur V. Williams, Charleston, S. C.
- 11:30 to 12:00 p. m. BLEEDING IN THE LAST TRIMESTER OF PREGNANCY  
Dr. A. Stark Wolkoff, Assistant Professor of Obstetrics & Gynecology, University of North Carolina  
Dr. Wolkoff will discuss the placenta as an organ, as well as the clinical significance of bleeding in late pregnancy, plus a discussion of clotting mechanisms.
- 12:00 to 12:10 p. m. DISCUSSION  
Dr. J. Decherd Guess, Greenville, S. C.
- 12:10 to 12:40 p. m. ROENTGENOTHERAPY IN FEMALE MALIGNANCY  
Dr. Charles A. Bream, Associate Professor, Roentgenology, University of North Carolina  
A discussion of conventional x-ray therapy, super voltage and radio isotopes in malignant disease in females.
- 12:40 to 12:50 p. m. DISCUSSION  
Dr. J. Harvey Atwill, Jr., Orangeburg, South Carolina

#### THURSDAY AFTERNOON: APRIL 27

Presiding: Dr. R. C. Smith, Chairman, Program Committee  
SECTION A — 2:30 to 3:30 p. m.

#### MEDICINE AND SURGERY THYROID DISEASES — A PANEL DISCUSSION

Dr. James F. Newsome	Department of Surgery University of North Carolina
Dr. William B. Blythe	Department of Medicine University of North Carolina
Dr. Charles A. Bream	Department of Roentgenology University of North Carolina
Dr. William H. Priolcau	Department of Surgery Medical College of South Carolina
Moderator — Dr. John Buse	Department of Medicine Medical College of South Carolina

This panel should discuss the diagnosis and treatment of thyrotoxicosis, solitary nodules of the thyroid, cancer of the thyroid, myxedema, plus the complications of thyroid disease and thyroid surgery.

SECTION B — 2:30 to 3:30 p. m.  
Presiding: Dr. J. P. Cain, President, S. C. M. A.  
PEDIATRICS, OBSTETRICS, GYNECOLOGY

#### THE EFFECT OF DRUGS AND ANESTHETIC AGENTS ON MOTHER AND CHILD, PRE & POST PARTUM

Dr. A. Stark Wolkoff	Department of Obstetrics & Gynecology University of North Carolina
Dr. Herbert S. Harned	Department of Pediatrics University of North Carolina
Dr. Lawrence Hester	Department of Obstetrics & Gynecology Medical College of South Carolina
Dr. Laurie Brown	Department of Anesthesiology Roper Hospital, Charleston, S. C.
Moderator — Dr. John R. Paul, Jr.	Department of Pediatrics Medical College of South Carolina

The advantages and disadvantages of drugs, anesthetic agents, parenteral fluids and trans-

fusion needs re-emphasis. The place of hypnotherapy in this field is debatable. These points will be discussed.

#### THURSDAY AFTERNOON: APRIL 27

Presiding: Dr. R. C. Smith, Chairman, Program Committee  
SECTION C — 3:45 to 5:00 p. m.

#### MEDICINE AND PEDIATRICS THE COLLAGEN DISEASES — A PANEL DISCUSSION

Dr. Herbert S. Harned	Department of Pediatrics University of North Carolina
Dr. William B. Blythe	Department of Medicine University of North Carolina
Dr. H. R. Pratt-Thomas	Department of Pathology Medical College of South Carolina
Dr. D. Lesesne Smith	Spartanburg, South Carolina
Moderator — Dr. Vince Moseley	Department of Medicine Medical College of South Carolina

This should include not only a discussion of the so called collagen diseases, such as lupus erythematosus, panarteritis, dermatomyositis, but also the possible relation to rheumatoid arthritis, rheumatic fever and nephritis.

#### SECTION D — 3:45 to 5:00 p. m.

Presiding: Dr. J. P. Cain, President, S. C. M. A.  
SURGERY, OBSTETRICS, GYNECOLOGY

#### THE PAINFUL FEMALE PELVIS — A PANEL DISCUSSION

Dr. James F. Newsome	Department of Surgery University of North Carolina
Dr. A. Stark Wolkoff	Department of Obstetrics & Gynecology University of North Carolina
Dr. Edward J. Dennis	Department of Obstetrics & Gynecology Medical College of South Carolina
Dr. Charles A. Bream	Department of Roentgenology University of North Carolina
Moderator — Dr. William C. Cantey	Columbia, South Carolina

Dysmenorrhea, endometriosis, displacement of the uterus, benign and malignant tumors, their diagnosis and treatment. Other conditions such as diverticulitis, renal and musculoskeletal causes will be discussed.

In addition to the regular presentation, a number of motion pictures will be shown during the program so that members who are not interested in the current portion of the program may avail themselves of the opportunity to view an instructive film.

On Wednesday morning, for those who are not otherwise engaged, there will be available at the Medical College a series of tours which are intended to give the participants a quick view of the research activities which are being carried out. These will probably be arranged at several different starting times, and fuller announcement as to details will be made later.

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# News

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#### SCHOLARSHIP IS CREATED HONORING DR. H. J. STUCKEY

The medical staff of the Bamberg County Memorial hospital has established a fund to be known as the Dr. H. J. Stuckey scholarship fund.

The purpose of the fund is to make available funds to enable young women of Bamberg county to pursue a career in the nursing profession.

Dr. Stuckey, who is honored and recognized by the medical staff by establishing the scholarship fund, has been practicing medicine in Bamberg for almost 50 years. He went to Bamberg in July 1911, following his graduation from the Medical College of S. C., back in the horse and buggy days.

He succeeds Dr. Davis D. Moise. Elected staff secretary during the meeting, was Dr. Lee A. Givens.

#### HORRY COUNTY MEDICAL SOCIETY

New officers of the Horry County Medical Society were recently elected. They are: Dr. G. P. Joseph, president; Dr. D. L. Duerk, vice-president; and Dr. W. S. A. Harris, secretary-treasurer.

#### STAFF OFFICERS

New medical staff officers at St. Francis Hospital, Greenville, were named recently. They are Dr. L. N. Bellew, president; Dr. Larry Crowl, vice president, and Dr. Graham Hopper, secretary.

Dr. Robert P. Bultman was elected to head the medical staff at Tuomey Hospital in Sumter for 1961.

Henry J. Ritchie, M. D. announces the removal of his office from 3834 Dorchester Road to 526 Maybank



Highway, Riverland Terrace for the practice of General Medicine.

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Dr. Philip O. Shillinglaw announces the opening of his offices for the purpose of General Practice of Medicine in St. Stephen, S. C.

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Dr. Allen Parrott Jeter has begun practice in Winnsboro.

Dr. Jeter worked with the U. S. Public Health Service for two years and entered the Medical College of South Carolina in 1956, where he graduated in 1959. He served internship at Columbia Hospital.

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#### **DR. ZEMP CHOSEN**

Dr. Charles H. Zemp, Jr., has been named chief of staff for 1961 at the Kershaw County Memorial Hospital at Camden. He succeeds Dr. J. W. Brunson, who now becomes vice chairman.

Dr. B. W. Marshall is the staff's new secretary.

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Dr. Mack Steward Bonner has moved to Anderson from Savannah, Ga., to open an office for practice. He has been admitted as a member of the Anderson Hospital staff and given privileges in anesthesiology at the hospital.

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#### **DR. P. KENT SWITZER AWARDED FELLOWSHIP**

P. Kent Switzer, M. D. of Union, has received a Full Fellowship in the American College of Physicians. Dr. Switzer is the only practicing physician in Union to receive the high honor, and is among some 15 throughout the State of South Carolina.

Dr. Switzer is associated with his father, Dr. P. K. Switzer in the practice of medicine in Union. He is an internist and diagnostician.

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#### **DR. HOLMES LEAVES**

For about 30 years Dr. Gertrude Holmes has practiced internal medicine in Greenville and long has been recognized as one of the best, proving that women are fully the equals of men in the practice of medicine.

She plans to leave private practice, however, to join the staff of the Veterans Administration Hospital at Dublin, Ga.

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#### **DR. JONES OPENS OFFICE**

Dr. Lewis E. Jones, Jr., a 1957 graduate of the Medical College of South Carolina, who served his internship at Greenville General Hospital has begun medical practice as an associate of Dr. William M. Shirley in Greenville.

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#### **DR. HENDRIX HONORED**

Dr. William T. Hendrix was honored by his colleagues at a meeting of the Spartanburg County

Medical Association by being named doctor of the year for his county. Dr. Hendrix is a general practitioner in Spartanburg.

E. Arthur Dreskin, M. D., Donald G. Kilgore, Jr., M. D. and W. Marion Waters, III, M. D. announce the opening of an office for the practice of Clinical and Anatomie Pathology including Cytology at 11 Sumner Street, Greenville, S. C.

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Virgil Harvey, Jr., M. D. announces the opening of his office at 1492 Sumner Ave., N. Charleston for the practice of general medicine.

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#### **STUKES SERVES OVER 50 YEARS**

Dr. Lionel C. Stukes has observed his 81st birth anniversary and is still actively engaged in his profession in Summerton.

Dr. Stukes, 81 on December 14, is a Manning native and was graduated from the Medical College of South Carolina. He went to Summerton in 1904 and has served the public since, as physician, benefactor and friend.

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The twenty-ninth annual Medical and Surgical Clinic of the Union Community Hospital was held Friday, January 27, preceded by a banquet the night before. The banquet was in honor of Dr. L. A. Sarto-Bolden.

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Dr. C. W. Legerton, Jr. of Charleston has just received certification of his election to active membership in The American Gastroenterological Association. He will be inducted at the annual meeting in Chicago in May.

Dr. Legerton is the first and only member of this society from the State of South Carolina.

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#### **DR. BURLEY HONORED**

Dr. Robert Burley, Clemson physician, was named "young man of the year" for Clemson at an awards night session of the Clemson Junior Chamber of Commerce. The award was presented by Dr. Bill Hunter, another physician.

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#### **DR. GODWIN MOVES TO CHERAW**

Dr. Winston Y. Godwin, who is to be associated with Dr. J. E. Hodge in the practice of general medicine and surgery, moved to Cheraw with his family in December.

Dr. Godwin is a 1949 graduate of Clemson College in engineering and was in private business for four years before being called to the Air Force.

After his discharge he completed a years post-graduate study at The Citadel and then entered the Medical College of S. C. in 1954, where he was first honor graduate.

He has completed a rotating internship at Roper Hospital and the Medical College Hospital.



CHARLESTON COUNTY HEALTH CENTER DEDICATED IN HONOR OF LEON BANOV, M. D.

S. C. State Board of Health

Photograph by E. S. Powell

#### LEON BANOV, M. D.

On March 7, Charleston's new Health Center, dedicated to Leon Banov, M. D., was formally opened with appropriate remarks by various prominent personages.

This fine new center is a monumental testimonial to the successful efforts of Dr. Banov to provide for Charleston County the best in accomplishment in public health. Dr. Banov's long and efficient efforts in this field have achieved recognition in many quarters. Dedication of the building to Dr. Banov during his lifetime is an unique tribute to his faithful and expert service to the people of Charleston County.

Dr. Banov's *curriculum vitae* follows:

Dr. Leon Banov, Sr.

Born in Suavalki, Poland, July 5, 1888

Graduate in Pharmacy, School of Pharmacy, Medical College of South Carolina (Ph. G.)

Graduate in Medicine, School of Medicine, Medical College of South Carolina (M. D.)

Honorary degree—Doctor of Laws—College of Charleston, 1960

Assistant city bacteriologist (1912)

Milk inspector—During this period, Dr. Banov in great measure was responsible for Charleston to become the first city in the United States to require pasteurization of all milk sold in the city (1919)

Appointed County Health Officer (1920)

In 1936, the county took over the administration of the city health department

At present, he continues to serve as Director of The Charleston County Health Department

During his health officership, Charleston won honorable mention in the National Health Conservation Contest sponsored by the U. S. Chamber of Commerce for the years 1932, 1933, 1934, 1935, 1936, and 1939. In 1938, Charleston won first place.

This is recognition of Dr. Banov's efficient administration of the health department in its efforts to improve the health and environment of the community.

In addition to being health officer of Charleston County, Dr. Banov is Professor of Public Health at the Medical College of South Carolina and is special consultant to the United States Public Health Service. He is a Diplomate of the American Board of Preventive Medicine (certified as a specialist in preventive medicine).

In the early 1920's, Dr. Banov served as executive secretary of the Charleston County Tuberculosis Association and played a leading role in establishing Pinehaven.

Dr. Banov has served as

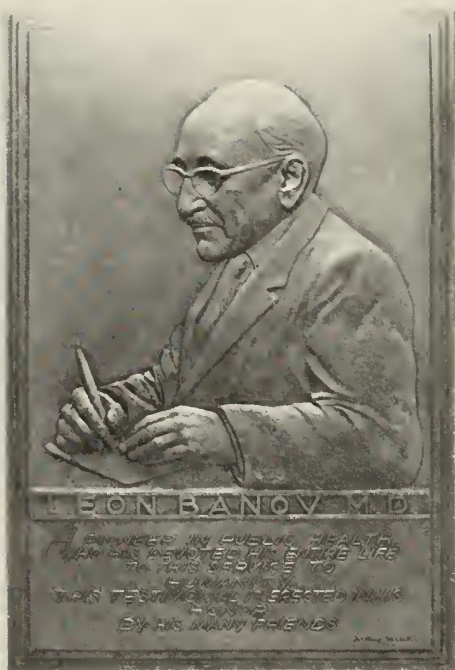
President of the International Society of Medical Health Officers.

Chairman of the Health Officers Section of the American Public Health Association.

Chairman of the Public Health Section of the Southern Medical Association.

President of the South Carolina Public Health Association.

President of the Charleston County Medical Society.



*Plaque of Dr. Leon Banov provided by his many friends and executed by Willard Hirsch.*

*This plaque occupies a prominent place near the entrance to the new Health Center.*

Dr. Banov has given 49 years of continuous service in public health work in Charleston and Charleston County. During this time he has labored faithfully and meritoriously and his achievements have brought national recognition to him and his community.

#### DR. SIEGLING ON TRUSTEE BOARD

Dr. John Arthur Siegling, Charleston surgeon, was recently named to the College of Charleston Board of Trustees. Dr. Siegling is a native of Charleston. He was graduated from the College of Charleston in 1928 and from the Medical College of South Carolina four years later. He is an orthopedic surgeon and has contributed many scientific papers to medical journals.

#### ANDERSON COUNTY OFFICERS

Dr. C. Wilson Orr has been named president of the Anderson County Medical Society to succeed Dr. J. W. Wyman. Serving with him in the coming year will be Dr. Leo E. Davison, vice-president; Dr. Olin Meredith, secretary; and Dr. Charles Bailes, treasurer. New officers were installed Tuesday, January 10.

#### DR. COUNTS OPENS OFFICE

Dr. Gurdon W. Counts, after completing a year as an intern in the Greenville General Hospital, has returned to his old home in Prosperity to practice medicine. He will be associated with Dr. Leslie Mills.

Dr. Counts is a graduate of the Prosperity High

School, Newberry College and the South Carolina Medical College in Charleston.

#### DR. YATES, UROLOGIST, RETIRES

Dr. Theodore M. Yates, Chief Urologist at the VA Hospital in Columbia has retired after approximately 18 years of government service, Dr. Chalmer Davee, manager, announced.

Dr. Yates was born in Durham, England. He received his M. D. Degree from the University of Georgia Medical Department in 1919 and completed his internship at Roosevelt Hospital in New York City. He served as a foreign missionary from 1922 to 1942 with assignments in Canada and China. He entered active duty with the Medical Corps, U. S. Army in 1943 being ordered back to China where he had served previously as a missionary, and remained in the service until 1946, obtaining the rank of Lt.-Colonel. He was awarded the Bronze Star Medal for outstanding service. On February 21, 1946 he was appointed in the VA and assigned to the VA Hospital at Columbia, and has been continuously employed there since that time.

Dr. Yates was certified by the American Board of Urology in 1955. He is a Fellow of the International College of Surgeons, is a member of the Southern Surgical Association and a Fellow in the American College of Surgeons.

F. Marion Dwight, M. D. will be in Branchville, S. C. for office hours Tuesdays and Fridays from 2 to 6 P. M.. Office hours will be observed in office of Dr. Donald Hiers.

#### DR. WHITE NAMED

Dr. Leta J. White is new president of the Cherokee County Mental Health Association.

Dr. White, who served as vice president during the past year, succeeds Dr. Denver J. Davis who has been president for two years. Other officers elected were Dr. G. Preston Edwards, vice president; Mrs. Alfred New, secretary; Mrs. Jack Blanton, assistant secretary and Dr. Paul Gratiot, treasurer.

Dr. Davis will be the association's representative on the South Carolina Mental Health Association Board.

#### 25 PHYSICIANS LICENSED IN S. C.

Twenty-five physicians were licensed to practice in South Carolina during a meeting of the State Board of Medical Examiners of South Carolina on December 13 at the Columbia Hotel.

They are:

Dr. Charles R. Richardson, a graduate of the Medical College of Georgia (1958) and licensed in Georgia. He is presently in the Navy and is serving a residency (Ob.-Gyn.) at the U. S. Naval Hospital, Portsmouth, Va. He plans to locate in Charleston at a later date.

Dr. Henry S. Anderson, a 1950 graduate of the Bowman Gray School of Medicine, is licensed in North Carolina and Georgia. He is presently serving



a residency in Radiology at the Medical College of Georgia and will be located at Spartanburg General Hospital after March 1, 1961.

Dr. Maek S. Bonner graduated from the Medical College of Georgia in 1952. He specializes in Anesthesiology. He will be practicing at the Anderson Memorial Hospital after January 1, 1961. He formerly practiced in North Carolina and Georgia.

Dr. Reese W. Bradford, who graduated from the Medical Department of the University of Georgia in 1922, practiced at Milledgeville State Hospital for 36 years. Dr. Bradford has been a psychiatrist at the S. C. State Hospital since October.

Dr. Leland C. Brannon, a 1947 graduate of the Vanderbilt University Medical School, is trained in Neurosurgery. He is presently located in Philadelphia where he was with the U. S. N. Hospital. He recently received his discharge from the Navy and will locate in Greenville after the 1st of January.

Dr. James C. Brice, Jr., who graduated from Emory University last June, is licensed in Georgia. Dr. Brice is serving his internship at Greenville General Hospital.

Dr. Dorothy T. Clark who graduated from the Harvard Medical School in 1952 has been in General Practice, for the past seven years, in Florida. She is presently living in Jackson.

Dr. Claude W. Delia, a 1950 graduate of the Yale School of Medicine, is presently located at the Conway Hospital. Dr. Delia completed a residency in Pathology at Walter Reed Hospital. He was recently discharged from the Army.

Dr. George M. Faile, Jr., who graduated from Emory University in 1951 has practiced medicine in West Africa for the past seven years. He is presently in General Practice at Greenville General Hospital.

Dr. Thomas C. Littlejohn, Jr., a 1959 graduate of the Vanderbilt University School of Medicine, is licensed in Georgia and Maryland. Dr. Littlejohn is presently serving an internship at Greenville General Hospital.

Dr. Allen H. Mackenzie who graduated from the Tulane University School of Medicine in 1955, is serving a residency in Internal Medicine in Cleveland, Ohio, and plans to locate in Spartanburg in September, 1961.

Dr. Joseph N. Marshall, a 1955 graduate of the University of Louisville, is licensed in Kentucky. Dr. Marshall completed a residency in Neurology at University Hospital in Michigan and is now at the Medical College Hospital in Charleston.

Dr. David C. McLean graduated from the University of Tennessee in 1954, and is licensed in Tennessee. Dr. McLean completed a residency in Pediatrics at Children's Hospital of Philadelphia and is now in practice in Florence.

Dr. James K. McDonald received his degree from the Medical College of Georgia where he served a residency in Psychiatry. Dr. McDonald is presently in service and will be at Fort Jackson until June, 1962.

Dr. Harold L. Murray has an M. D. degree from Emory University, class of 1951. He served a residency in General Practice and in Urology. He is in the practice of Urology in Winston-Salem at present and plans to move to Anderson in about six months.

Dr. Franklin W. Roush, Jr., a 1941 graduate of the University of Cincinnati, is licensed in Florida and Ohio. He is in the practice of Internal Medicine in St. Petersburg, Fla., and expects to practice in Anderson when he is in South Carolina.

Dr. Margaret M. K. Shelton who has an M. D. degree from Tulane University and has served a residency in Internal Medicine is licensed in Louisiana. Dr. Shelton is now located in Charleston.

Dr. Marion D. Shelton, a graduate of Tulane University, class of 1947, has completed a residency in Psychiatry and has been practicing in Charleston since October.

Dr. Richard O. Stader, who graduated from Jefferson Medical College in 1953 and served a residency in Orthopedic Surgery, is now practicing in Florence. Dr. Stader is also licensed in Pennsylvania.

Dr. John D. Thomas, a 1956 graduate of the Johns Hopkins University School of Medicine, took a residency in Anesthesiology and is presently at the U. S. Naval Hospital in Charleston. He expects to begin practicing in Charleston around July.

Dr. William P. Tinkler, a 1951 graduate of the Vanderbilt University School of Medicine, is licensed in Tennessee and Florida. He served a residency in Radiology at Jackson Memorial Hospital in Miami. Dr. Tinkler has been located in Greenwood since September.

Dr. Alexander F. Weir, Jr., who graduated from the Bowman Gray School of Medicine in 1953, will complete a residency in Otolaryngology at N. C. Baptist Hospital next June. He plans to locate in Spartanburg.

Dr. James A. Bennett, a graduate of the Medical College of Virginia, class of 1916, practiced in Algoma, W. Va., for 28 years before he came to South Carolina in September. He is in General Practice at the Columbia Hospital.

Dr. Donald M. Rowe who graduated from the Marquette University School of Medicine in June, 1951, is in Industrial Medicine with the Kohler Co. in Wisconsin. He will be with the plant in Spartanburg several times a year.

Two other physicians appeared before the Board, presented their credentials, and will be licensed upon completion of their applications. They are:

Dr. Timothy M. Corrigan who has an M. D. degree from Georgetown University, class of 1937. Dr. Corrigan is a surgeon and was in practice in Pennsylvania before coming to South Carolina. He is with the Veterans Hospital.

Dr. Paul C. Swenson who graduated from the University of Minnesota School of Medicine in 1926 and is licensed in Minnesota. Dr. Swenson is a Radiologist at the Veterans Hospital.

# FIFTH GREENVILLE POSTGRADUATE SEMINAR

## A PRACTICAL SEMINAR

GREENVILLE, S. C. — APRIL 11, 12, AND 13, 1961

This program has been prepared with the practicing physician in mind. Our speakers are men of outstanding reputation, our atmosphere informal, and our subjects are those daily problems met by the practicing physician, regardless of particular interest or specialty.

### GUEST SPEAKERS

Dr. Richardson Hill, Jr.	Associate Professor of Medicine University of Alabama
Dr. Victor Vaughan	Professor of Pediatrics University of Georgia Medical School
Dr. Ben Branscombe	Assistant Professor — Pulmonary Diseases University of Alabama
Dr. B. L. Martz	Lilly Research Laboratories Eli Lilly & Company Indianapolis 6, Indiana
Dr. Peter Gazes	Professor of Medicine Medical College of South Carolina
Dr. Monroe Romansky	Professor of Medicine George Washington University Medical School
Dr. James G. Mulé	Professor of Obstetrics and Gynecology Louisiana State University Medical School
Dr. Joseph Cain	President, South Carolina Medical Association
Dr. John Cuttino	Dean Medical College of South Carolina

### TUESDAY, APRIL 11, 1961

New Auditorium — Out Patient Department — Greenville General Hospital

8:00	Registration	
8:30	Welcome	
9:00	Dr. Richardson Hill	Hyperadrenal Corticicism
10:00	Dr. Victor Vaughan	Pediatric Genetics
11:00	Dr. Ben Branscombe	Management of Chronic Suppurative Pulmonary Disease
12:00	Dr. James Mulé	Infected Abortion
12:40	Question & Answer period for morning lectures. Drs. Hill, Vaughan, Branscombe, Mulé and Cuttino.	
1:10	Luncheon	
	Dr. Peter Gazes	External Cardiac Massage
2:30	Dr. Monroe Romansky	Factors Influencing the Trend of Antibiotic Therapy
3:30	Dr. B. L. Martz	Differential Diagnosis of Hypertension
4:10	Question & Answer period for afternoon lectures. Drs. Gazes, Romansky, Martz, and Cuttino.	
7:00	Ladies' Night — Poinsett Club	
	Social Hour	
8:00	Buffet	

### WEDNESDAY, APRIL 12, 1961

9:00	Dr. James G. Mulé	Therapy of Prolonged Ruptured Membranes
10:00	Dr. Monroe Romansky	Steroids and Infectious Diseases
11:00	Dr. B. L. Martz	Management of Patients with Chronic Renal Disease
12:00	Dr. Richardson Hill, Jr.	Pituitary Adrenal Responses
12:40	Question & Answer period for morning lectures. Drs. Mulé, Romansky, Martz, Hill, and Cuttino.	
1:10	Luncheon	
	Dr. Joseph Cain	Medicine 1961
2:30	Dr. Victor Vaughan	Jaundice in the Newborn
3:30	Dr. Ben Branscombe	Inhalation Therapy in Private Practice
4:30	Dr. Peter Gazes	Diagnosis of Angina Pectoris
5:10	Question & Answer period for afternoon lectures. Drs. Cain, Vaughan, Branscombe, Gazes, and Cuttino.	
7:00	Country Club — Social Hour	
	Host, Parks McKinney, Russell Jones, B. F. Ascher & Co.	
8:00	Banquet	
9:00	Dance	

### THURSDAY, APRIL 13, 1961

9:00	Dr. B. L. Martz	Therapy of Primary Hypertension
10:00	Dr. Monroe Romansky	The Staphylococcal Problem and Its Therapy
11:00	Dr. Victor Vaughan	Some Unsuspected Manifestations of Allergy in Children

12:00	Dr. Peter Gazes -----	Treatment of Angina Pectoris
12:40	Question & Answer Period for morning lectures. Drs. Martz, Romansky, Vaughan, Gazes, and Cuttino.	
1:10	Luncheon	
	Dr. John Cuttino -----	Some Disturbing Thoughts in Present Day Medical Trends
2:30	Dr. Ben Branscombe -----	The Diagnosis of Unusual Pulmonary Conditions
3:30	Dr. James Mulé -----	Acute Renal Failure in Toxemia of Pregnancy
4:10	Question & Answer Period for afternoon lectures. Drs. Cuttino, Branscombe and Mulé.	

29th ANNUAL MEETING  
SOUTHERN BRANCH AMERICAN  
PUBLIC HEALTH ASSOCIATION  
LOUISVILLE, KENTUCKY  
APRIL 12, 13, 14, 1961

AMERICAN COLLEGE OF  
OBSTETRICIANS AND GYNECOLOGISTS  
There will be a Conference at 11:00 a. m. on

Wednesday, April 26, 1961 at The Americana, Bal Harbour, Florida, of the officers and members of local, state, county, and regional Maternal Mortality Committees. The meeting will be under the chairmanship of Alan Cuttmacher, M. D., Chairman of the Committee on Maternal and Perinatal Health of the American College of Obstetricians and Gynecologists. Drs. Edward H. Dennen of New York and Edmund W. Overstreet of San Francisco are members of this committee.

## From The Press

### AMA LEADERS SET BACK AT CONFERENCE ON AGING

The White House Conference on Aging was a distinct disappointment to the leaders of the AMA. Practically everything went wrong. And by the time the last participant left Washington, it was clear that the experience had cost the AMA more than it had gained.

In the beginning, the AMA was charged with "rigging" the conference committees in order to block support for a Social Security-style aged care program. But events quickly revealed that the principal accusers—the smooth-working labor delegates—were actually in control.

The AMA also thought it had reason to expect the support of Republican leaders.

Yet it got one of its sharpest setbacks when two officials of the Eisenhower Administration—former Health Secretary Marion B. Folsom and Labor Undersecretary Arthur Larson—threw in their lot with the Social Security forces.

Dr. Leonard W. Larson, AMA president-elect, won the backing of his health and medical care section for an attack on the Social Security approach. But the income maintenance section which was charged with the financing problem rolled through a resolution giving the Social Security approach a thumping endorsement. It declared that public assistance and voluntary insurance "will continue to fall short of meeting the basic medical care needs of the aged as a whole."

The end result was that the general public, and more particularly Congress, got the impression that the Conference leaned toward the Social Security formula. And this couldn't help but boost the chances of the AMA-opposed bill which the Kennedy Administration will push in the new Congress.

*Medical World News*

### DR. JAMES R. YOUNG:

In my time I have been privileged to watch the careers of many brilliant men and women in varied fields, and it has always been a source of much satisfaction to note that so many of these careers have been topped with a bit of crowning glory.

I have watched for many years your brilliant and useful career in the field of medicine and surgery, and I recall that the honors coming your way have been numerous, including one that came to you many years ago that of a Fellow of the American College of Surgeons, which I believe, was one of the first of the FACS awards made to an Anderson medical man.

But, about this additional contribution you are making after a long and brilliant career in medicine and surgery, and which I choose to describe as your "crowning glory." Your interest and work in the important field of cancer control is a source of much gratification to your friends and patients here in Anderson. The work you have done has given great impetus to this effort to find the cause and cure of this dread disease. I am sure you have spared no personal effort in this great crusade and you may feel assured that your name will be blessed for your untiring fight and personal sacrifice.

COLONEL ANDERSON  
—*The Daily Mail* (Anderson)  
January 21, 1961

### POLITICS FIRST

The White House Conference on Aging has come under fire from George Meany, president of the AFL-CIO, because some of the participants dare to believe that private medical care is superior to socialistic medical care.

Even before the conference opened Monday, it was apparent that advocates of federal medical aid



programs would seek to discredit the meeting. They were bitter because supporters of private medicine were represented.

Dr. J. Lafe Ludwig of Los Angeles, chairman of the American Medical Association Council on Medical Service, said: "If this conference fails, the responsibility rests squarely upon the shoulders of George Meany."

Mr. Meany's open hostility to the AMA for preferring private medicine care to socialist programs is a measure of radical penetration in American life and

thinking. No physician should apologize for refusing to believe that the superstate is the best doctor.

Anyone familiar with the record of Big Unionism should realize that it puts political doctrines ahead of human needs. Some of the conference participants may not realize it, but the union bosses and other advocates of socialism would rather see this and every other medical conference fail than for their precious doctrine of Big Government to suffer.

—*News & Courier* (Charleston)

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## Deaths

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### DR. JAMES L. BRYSON

Dr. James Lauderdale Bryson, 71, died at his home in Winnsboro, January 26th after an illness of several months.

Dr. Bryson took up the study of medicine at the College of Physicians and Surgeons at Atlanta, Ga., from which he was graduated.

He pursued postgraduate work with the City Health Department of New York City and at the Lying-In Hospital in Philadelphia.

He served in the United States Army Medical Corps and since 1928 had been connected with the Fairfield County Health Department.

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### COL. W. H. MONCRIEF

Col. William Henry Moncrief, Medical Corps, USA Ret., died January 25th at Fitzsimons General Hospital, Denver, Colo., following a long illness. He was 84 years old.

Following his retirement, he was appointed Superintendent of the South Carolina Tuberculosis Sanitarium, State Park, S. C., a position he held for 16 years until 1954 when his health failed.

Colonel Moncrief was a member of the American Medical Association and was a Fellow, American College of Surgeons. He also belonged to the Columbia Medical Society, Trudeau Society, American Tuberculosis Association, Columbia Rotary Club, Spanish-American War Veterans Association, the American Legion and numerous other professional and civic clubs.

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### DR. J. P. KILLEY

Dr. John Philip Killey, 39, was found dead in his automobile in a deserted area near the ocean in the Briar Cliff Acres section near Myrtle Beach, S. C.

Dr. Killey was graduated from The Citadel and the Medical College of South Carolina. He served in the Army Medical Corps in Korea and at Fort Jackson. He had practiced in Myrtle Beach for 12 years.

### DR. AMOS C. ESTES

Dr. Amos C. Estes, 67, retired physician of Bethel Community Hospital, Fairfield County, died in the Columbia Hospital.

Dr. Estes was born in Laurens, attended Furman Fitting School and was graduated from Emory University School of Medicine in 1917. Since that time he has made his home in Fairfield County where he practiced medicine. He also practiced in surrounding territory and had retired several years ago.

He was a member of the Fairfield County Medical Association and the S. C. Medical Association.

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### DR. GEORGE H. McLEOD

Dr. George Holliday McLeod age 26, died December 28 as a result of a hunting accident.

Dr. McLeod was a son of the late Dr. James C. McLeod and grandson of Dr. Frank H. McLeod, both of whom served as presidents of the South Carolina Medical Association. He attended the University of North Carolina where he was elected president of the senior class and was chairman of the Men's Honor Council, member of Phi Beta Kappa and the Order of the Golden Fleece. He was presented with the Algernon Sydney Sullivan Award as the outstanding graduate of his class. Dr. McLeod received his medical degree from Cornell University College of Medicine in 1958 and was in his second year as resident in surgery in the New York Hospital.

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### DR. J. R. CLAUSSEN

Dr. John R. Claussen, 69, director of the Florence County Health Department, died December 20.

Dr. Claussen was born at Claussen, February 21, 1891. He was educated at Presbyterian High School, was graduated from Porter Military Academy, and received his medical degree from the Medical College of South Carolina in 1913. He interned at Roper Hospital in Charleston.

Dr. Claussen was a member of the First Presbyterian Church of Florence. He was a member of the

American Legion, Veterans of World War I; VFW, for which he was post surgeon; the Florence County and the Pee Dee Medical Societies, the South Carolina Medical Association, and the South Carolina Public Health Association, of which he was a past president.

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#### DR. WALTER LANCASTER

Dr. Walter B. Lancaster, 83, retired pioneer Spartanburg physician, died December 21st in a Columbia Hospital after a long illness.

A general practitioner until his retirement and member of a well known Spartanburg family, Dr. Lancaster was graduated from Wofford Fitting School as a young man. In 1909 he was graduated from the Vanderbilt University School of Medicine.

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#### DR. J. A. WERTZ

Dr. John Alexander Wertz, 53, died at his home in Estill, December 30th.

Born in Savannah, September 26, 1907, Dr. Wertz was first honor graduate of Presbyterian College, class of 1928. He was a member of Pi Kappa Alpha fraternity.

Dr. Wertz was a veteran of World War II, serving in the Army Medical Corps. He had practiced medicine in Estill 26 years.

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#### DR. THOMAS G. SHARP

Dr. Thomas G. Sharp, 76, well known Greenville urologist, died at a Greenville hospital after a week of illness.

A native of Hiddenite, N. C., he was a member of the Greenville County and South Carolina Med. Assoc., the American Medical Association and the urological association, and was a former secretary of the polio campaign.

He was a member of the Benevolent and Protective Order of Elks Lodge No. 858, having served for eight years as exalted ruler.

The honorary escort was formed by members of the Greenville County Medical Society and the members of Elks Lodge 858.

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#### DR. R. G. ANDERSON

Dr. Ruskin G. Anderson of Spartanburg, 53, a past president of the South Carolina Medical Association died at General Hospital December 30 following a brief illness.

Dr. Anderson was a native of Woodruff, a graduate of Furman University and of the Emory University School of Medicine. He was a member of the American Academy of Ophthalmology and Otolaryngology.

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#### DR. LESLIE HAYS

Dr. Leslie St. Clair Hays, 72, retired physician and surgeon of Clinton died December 28 after several years of declining health.

A native of Clinton, where he spent most of his life and founded a hospital, Dr. Hays received his early education in local schools. He took a B. A. degree at

Presbyterian College in 1906 when he was valedictorian of his class.

In 1913 he was an honor graduate of the College of Physicians and Surgeons of Columbia University. From 1913-15, he was house surgeon at Bellevue Hospital in New York. The following year he served at New York Nursery and Child's Hospital.

He founded Hays Hospital in Clinton in 1916 and operated it until its sale in 1946.

He was operating surgeon at the Army General Hospital in Fort Oglethorpe, Ga., in 1918. He served as professor of biology on the Presbyterian College staff in 1929-30.

Dr. Hays represented the alumni on the college board of trustees from 1935-50. By request of the trustees, he continued for another five years as a member of the finance committee.

His alma mater awarded him the Gold P. as "Alumnus of the Year" in 1942.

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#### COLUMBIA MEDICAL SOCIETY RESOLUTIONS ON THE DEATH OF DR. THEODORE MARION DUBOSE, JR.

Dr. Theodore Marion DuBose, Jr. was born in Rock Hill, S. C., on November 24, 1886. His mother was Mrs. Beverly Means DuBose and his father was Dr. T. M. DuBose, Sr., who was also a distinguished and much beloved physician.

Dr. DuBose, Jr. was reared and educated in Columbia Schools and was a graduate of the University of South Carolina. He studied medicine at the Medical College of South Carolina in Charleston, graduating in the class of 1910 with honors. He served with distinction as "Chief of Staff" of Roper Hospital interns. After a year at Roper Hospital, he spent a year of post-graduate study at the Physicians and Surgeons Hospital in New York City.

Dr. DuBose, Jr. and Miss Sarah Bland Hammond, affectionately called "Miss Sally", were married April 10, 1912. They were blessed with four gifted and attractive children. One son, Dr. Hugh DuBose, is an active and highly esteemed member of our Columbia Medical Society.

The members of this committee have all known Dr. DuBose, Jr. intimately for over 35 years. One, Marion H. Wyman for fifty-five years, which includes all of his medical life from the day he entered the Medical College until his death on November 23, 1960, the eve of his seventy-fourth birthday.

Dr. DuBose, Jr. liked the practice of medicine in general but he loved obstetrics and the care of infants and children. His success is indicated by the love and admiration of many thousands of his patients.

Dr. DuBose, Jr. has been president of the Columbia Medical Society and was a member of other local, state and national medical associations. He has read several medical papers. One, a number of years ago, had to do with "Anesthesia in Obstetrics" which received much favorable discussion. He was a charter member of the Forest Lake Country Club and was made an honorary member of that organization.

Dr. DuBose, Jr. was a life-long, loyal member of Trinity Episcopal Church. He was always cheerful, genteel, gentle, unassuming, unselfish and kind. He had an unshakable abiding faith about life eternal.

Dr. DuBose, Jr. was truly a Christian physician who went about doing good and he will be greatly missed and long remembered by his many patients and friends.

THEREFORE, be it resolved that the Columbia Medical Society has lost a valuable and beloved

member; second, that a page in the minutes of this Society be dedicated to his memory; third, that we extend to his family our deepest sympathy in their loss; fourth, that a copy of these resolutions be sent to the family and the local newspapers.

Respectfully submitted,

COMMITTEE:

M. H. WYMAN, M. D.

J. R. ALLISON, SR., M. D.

M. E. HUTCHINSON, M. D.

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42nd ANNUAL SESSION  
AMERICAN COLLEGE OF PHYSICIANS

Headquarters at  
THE AMERICANA HOTEL,  
MIAMI BEACH, FLORIDA  
MAY 8-12, 1961

For reservations write:

Reservation office  
THE AMERICANA HOTEL

9701 Collins Avenue, Bal Harbour  
Miami Beach 54, Florida

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Anyone interested in purchasing used medical equipment, nearly new, former property of Dr. J. P. Killey of Myrtle Beach, please contact:

Henry C. Heins, M. D.

59 Bee Street  
Charleston, S. C.

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"SMALL VOICE OF CONSCIENCE"  
ANSWER TO VA PROBLEM

*(The following comments were written by Dr. Ben Walpole of Houston in response to the contribution by Dr. Milton V. Davis of Dallas in the Pro/Con section of the August, 1960, Texas State Journal of Medicine, entitled "Physician Holds Key in Controlling VA Medical Program.")*

I read with much interest Dr. Milton V. Davis' comments in Pro/Con in the August issue of the *Texas State Journal of Medicine*. I follow each of his arguments, but not the final conclusion.

I fail to see how the refusal of private physicians to send patients to Veterans Administration hospitals could effect a decrease in the in-patient census. All the veteran needs to do to circumvent the physician who refuses to send him there is to go through the admitting office of the VA hospital. Most of the patients whom I have treated as private patients who have been in VA hospitals at one time or another have done just that.

The only answer is the "small voice of conscience" of the individual physician. All decent men and women desire only the finest care for the veteran whose disability is the result of service to his country. However when, as Dr. Davis states, "Regularly 66 per cent of in-patients and 85 per cent of patients discharged are treated for conditions in no way related to service-

connected disability," it becomes a matter of conscience for the individual physician whether he will aid the widespread philosophy that the government owes everyone a living.

I have known but one physician, who after serving for 3 or 4 months as a consultant to the VA hospital and who after surveying the situation as described, at a time when he himself was under considerable financial stress, decided it was contrary to his personal ethics to accept money from the government to treat nonservice-connected disability patients. He wrote a letter to the VA to this effect and resigned. More often I have heard physicians cynically refer to the set-up in which they accepted remuneration, often with unflattering references to the myriads of so-and-so's cluttering up VA hospital beds and detracting from the legitimate care due the real disabled veteran.

It is indeed a curious turn of thought on the part of the VA that the services of a hospital must be expanded for the maintenance of a residency program. The next step will be to inaugurate an obstetrical residency on the specious argument that it is necessary in order to have a pediatric service.

All of these things involve much fundamental philosophy in the retreat from individual responsibility on which I could write at length, but it appears that many physicians are no less vulnerable to the appeal of getting something for nothing than are their equally gullible lay brethren.

—BEN WALPOLE, M. D., Houston



# The South Carolina Heart Association

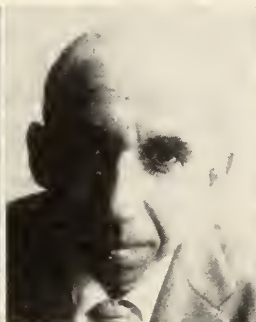
Announces:

## 12th Scientific Session and Annual Meeting

### GUEST LECTURERS



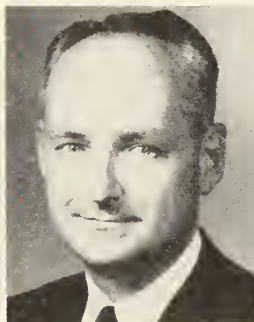
Jack D. Myers, M. D.  
Pittsburgh, Penn.



Jeremiah Stamler, M. D.  
Chicago, Ill.



J. Scott Butterworth, M. D.  
New York, N. Y.



W. Proctor Harvey, M. D.  
Washington, D. C.



E. Stanley Crawford, M. D.  
Houston, Texas

### ANNUAL MEETING LUNCHEON

Election of Officers

12 NOON

MARCH 31

POINSETT HOTEL

FRIDAY, MARCH 31, 1961

Poinsett Hotel

(Sessions begin at 1:00 P. M.)

JACK D. MYERS, M. D.

*"Vagaries in the Clinical Picture of Arteriosclerosis."*

JEREMIAH STAMLER, M. D.

*"Approaches to the Prevention of Coronary Disease."*

J. SCOTT BUTTERWORTH, M. D.

*"Aortic Stenosis—Another Great Masquerader."*

E. STANLEY CRAWFORD, M. D.

*"Surgical Treatment of Cerebral Arterial Insufficiency."*

JEREMIAH STAMLER, M. D.

*"Approaches to the Prevention of Coronary Disease."*

SATURDAY, APRIL 1, 1961

Greenville General Hospital

(Sessions begin at 9:00 A. M.)

E. STANLEY CRAWFORD, M. D.

*"Surgical Considerations of Renovascular Hypertension."*

J. SCOTT BUTTERWORTH, M. D.

*"Limiting Factors in Auscultation and How to Overcome Them."*

W. PROCTOR HARVEY, M. D.

*"The Systolic Murmur: Innocent Versus Organic."*

JACK D. MYERS, M. D.

*"Myocardial Versus Mechanical Factors in Heart Disease."*

W. PROCTOR HARVEY, M. D.

*"The Clinical Significance of Gallop Rhythm."*

### Evening Session

Greenville Country Club  
Dinner Meeting with Greenville  
County Medical Association

Guest Speaker

J. SCOTT BUTTERWORTH, M. D.  
Pres.-Elect American Heart Association

MARCH 31 - APRIL 1, 1961 — GREENVILLE, SOUTH CAROLINA

## PERSECUTION OF THE PHARMACEUTICAL INDUSTRY

Address of Austin Smith, M. D., President  
Pharmaceutical Manufacturers Association  
before the  
Michigan & Wayne County Academies of  
General Practice—Detroit—Sept. 7, 1960

If your office were located, as mine is, virtually within the shadow of the United States Capitol building, you might anticipate that the shadow would help to cool you in the hot summer days of Washington. But somehow, this is not the case, and perhaps there are researchers who would be curious about this strange antithesis of physical law. The fact seems to be that the shadow of the Capitol has served in recent months to magnify, rather than to shield the effects of the heat on those of us interested in health care.

If the foregoing seems cryptic, permit me to explain. A week ago the 86th Congress concluded its formal sessions. The attention it gave to medicine, pharmacy and the prescription drug industry in recent months has seldom, if ever, been exceeded in any similar period.

I wish I could say that all of the activities of the Congress had halted at the end of the formal session, but regretfully this is not the case. Unfortunately for a number of reasons, Members of Congress and other elected officials from some of our states need not campaign for victory in the general elections. For them it is necessary only to survive the competition, if any, in the primary election. Then they are free of the activity which at this season begins to enumber the vast majority of our legislators.

Such is the circumstance this morning of the man who undertook nine months ago today to "investigate" the prescription drug industry. I use this word "investigate" in the Senator's sense, not my own or yours. For our training has led us to believe that an investigation is a seeking of fact from which to draw a conclusion. However, in at least *this* Senator's concept an investigation is an effort to *display* certain information in order to convince others of a conclusion drawn before the investigation begins. The proof of my contention lies in the record already drawn in this so-called investigation, and which I invite you to examine at length elsewhere. In any event, as you know, this spurious probe was renewed this morning on Capitol Hill with no sign that the pattern would differ materially from that indicated in the previous 7,000 transcript pages of proceedings. I can, if you like, save you considerable reading time by telling you now what the outcome of the next week of hearings will be, from the point of view of those in charge of it: Antibiotics, the product-type currently being scrutinized, are really not so wonderful—they haven't cured *everything*; they cost too much because the companies which make them have an annoying and archaic custom of paying dividends to their stockholders; discovery of most of them occurred abroad

or was financed by the federal government; at any rate, you can purchase them for much less elsewhere; advertising them is expensive and succeeds only in brainwashing physicians; and you can save your patients a great deal of money if you prescribe them according to their generic name.

In reverse, I can give you this capsule report of what will be ignored: The incalculable conservation of lives and productivity which these products have helped make possible; the immeasurable incentive in the competitive, free-enterprise system which produces them and makes them readily available; the splendid research which, though costly in failure, has determined the identity of useful antibiotics and, what is equally as important, the methods to synthesize and mass-produce them; that while the price scales abroad are indeed somewhat lower, the wage scales are much further below those in this country; the constant informing of physicians through educational and promotional activities of the indications, counter-indications, usages of these products; and the fact that brand names guarantee the highest standards of production, content and effectiveness, for a difference in price of not more than pennies.

But I do not wish to dwell on this subject lest you think we in the drug industry have been alone in this odd, warm shadow of the Capitol dome. Pharmacy had its day in the sun when it rose to support a bill to outlaw mail order prescription filling in the District of Columbia, which is a focal point of such operations. Before the measure had progressed out of committee, however, the provision was stricken and the pharmacists had to retreat to opposition to the bill because of other, negative provisions in it.

On the brighter side, of course, was the encouraging outcome of the classic legislative battle over federal assistance for medical care for the aged. You are familiar with the fact that certain legislators, undaunted by a contrary vote of the House of Representatives, and the Senate Finance Committee, fought unsuccessfully to reinstate a plan of involuntary confiscation of wages to support an enforced program of medical assistance.

I should pause here to pay tribute to organized medicine at work in a citizens' cause. This was a clear example of how a group of people not ordinarily active or clamorous in political activity can, on the side of right, join with others in an effective expression of their views. This was a clean fight—with facts, not threats or abuse. Yet this was not the winning of any war for the American people; a skirmish, yes; a battle, possibly; but a war, no. For this was only an episode in the struggle of the Marxes, the Engels, the Fabians and their descendants, begun before any of us was born. They began this war for classless mediocrity, for state control of religion, the means of health, the means of production and communication. Many skirmishes have been won by the defenders in the intervening decades, yet the progress of the battle for individual freedom and initiative has not been

wholly satisfactory. Nowadays we need only look a few miles off the coast of Florida to grasp this point.

Medicine and its supporting fields have always been a major front in this struggle. A favorite argument of those who would supplant private institutions with state activity and control is, of course, that the efforts of the former are "inadequate." The entire field of health research is a striking example of attempts to apply this argument.

You gentlemen and your professional forerunners from the beginning of civilization have endeavored to understand better, and expand your knowledge of, the human body and mind. Similarly, though far more recently, the industry which I represent has tried to provide more specific therapeutic tools. Our objective is the same: To improve health.

As we look back we find that without exception the major military episodes in which our nation has been involved have spurred us to new efforts and lasting achievements. The first mass production of medicine, for Washington's army, began in 1778 at Carlisle, Pennsylvania. From the War Between the States and the years following, the names of Squibb, Searle, Lilly, Abbott, Tilden, Upjohn, Merrell, Wyeth and others became familiar. In World War I when imports were cut off from the leading nation of pharmaceuticals, Germany, the modern era of discovery, synthesis and mass production gained momentum.

The second World War, of course, saw the development of antibiotics. Parenthetically, I was much interested in a recent news magazine article recalling that in 1937 a group of scientists attempted together to peer 25 years into the future and predict technological advances by 1962. Curiously, although there were signs to the contrary, the group failed completely to foresee antibiotics. It was, we are told, Dr. Waksman of Rutgers who finally coined the word when he developed streptomycin—while doing research under a drug company grant—I might add.

The U. S. pharmaceutical industry, in the development of penicillin and subsequent products, made perhaps its greatest contribution to medicine and health the world over. This illustrates too the willingness of this industry to gamble substantial funds in projects of uncertain outcome when there may be a great gain to humanity. In this case companies plunged nearly \$23 million into construction of fermentation plant to meet wartime demands, despite the possibility that discovery of a process of synthesis would ruin the investment. It marked the beginning of a plentiful supply and downward price spiral of this medicine.

It is, of course, not necessary to recite to this distinguished audience in detail the achievements which have grown from the privately financed research and development activity of the U. S. pharmaceutical industry. When I appeared in the industry's behalf before the Senate committee last spring, I furnished long lists of these achievements for the record. It is my hope, though probably a futile one, that the in-

vestigating committee will refer to this documentation in its final report.

Today we are crossing the \$200 million per year mark in the rate of industry expenditures for health research and development. We fully expect this rate to double in the next ten years. Yet—and here we move back again into that not-so-benign shadow of the Capitol—we are witnessing the intrusion of the federal government in this area on a scale which is incomprehensibly massive.

Let me give you some figures in this connection. For the current fiscal year which began this past July, the National Institutes of Health, through the President, asked Congress for \$400 million. It considered this amount ample in view of available manpower. At this point, however, events took a turn seldom observed in the appropriations process. The House, acting first, persuaded itself that an additional \$55 million was required. The Senate Appropriations Committee, with an apparent desire for objective assistance, named a committee of professional people to make recommendations. This committee sought the advice of others, including representatives of the pharmaceutical industry, and then proceeded to ignore the advice offered.

Thus the so-called Jones Committee Report recommended \$664 million which the Senate promptly rubber-stamped. In conference between the House and Senate the final agreed appropriation was \$560 million or \$160 million more than NIH wanted.

Why, you may ask, do we assign this Congressional activity to the realm of the lengthening shadow? Here is one answer:

"The importance of strong and continued private support of science can scarcely be overemphasized. . . Private sources of funds in industry, education and philanthropy should exercise leadership in undertaking the large and imaginative scientific risks so necessary for keeping American science in the forefront of the advancement of human knowledge . . . As the Federal Government has increased its support of science in the last dozen years, there has been a hesitancy on the part of corporations and private foundations to maintain the level of their contributions . . . It would be most unfortunate if this hesitancy were to continue or spread . . ."

Now, those are not our words; they are from the President's Science Advisory Committee. The President himself, in a message to a symposium on basic research in New York City last year, warned that "We must recognize the possibility that the Federal Government with its vast resources and its increasing dependence on science, could largely preempt the field or blunt private initiative and individual opportunity. This we must never permit. Too much dependence upon the Federal Government may be easy, but too long practiced it can become a dangerous habit."

So we have examined briefly some matters of interest—mutual interest—that have generated the



political heat in the health field in a comparatively short few months in Washington. Pharmacy lost a skirmish. Industry lost one. The medical profession won one. Obviously the siege has not been lifted.

The future depends, essentially, on two things: First, the orientation of those who will be elected this fall to the executive and legislative branches of our national government; and second, the degree of responsibility as citizens that will be shouldered by the individuals and organizations who comprise the health team. The first, obviously, depends in part on the second. The visible signs are encouraging. Pharmacy, with 110,000 members and through the elevation of its professional status and increasing public

services, is increasingly more effective. The industry, with its 180,000 employees and 2,430,000 owners, is an awakening and potentially great force. The medical profession already leads in its citizenship sophistication. Others will follow these examples.

I think that by now we have learned to anticipate assault rather than to be taken by surprise and forced to retreat each time. This means we can take the offensive. Our goal is the victory of a way of life. Our tactics involve better communications among ourselves, mutual assistance, and the presentation of facts to the public which will permit opinion to take care of itself. This is our job. Let's stay on it.

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## **ACCREDITATION FOR NURSING HOMES**

**Grace Sandstrom Southerland  
Myrtle Beach, S. C.**

It has been my privilege during the past few years to work with the members of the South Carolina Association of Nursing Home on plans for a Nursing Home Classification program. Also during the past year it has been my privilege to serve on the American Nursing Home Association Volunteer Accreditation Committee. As a member of the Governing Council of the American Nursing Home Association representing South Carolina members, I was able to pool my state's urging for the program with the growing interest and demands of other states. This combination of voices was heard. It is now strong, forceful, and aggressive. The Committee anticipates that early in 1961 the Program will be ready for final publication.

When it became evident that a national program could be developed and put into motion, the state's classification program was held in abeyance until the mechanics of the national program could be announced. This delay will prevent overlapping of state committees, which can now begin to operate with a single unified purpose—the administration of a state program compatible with the requirements of the national program. The ANHA Accreditation Program tentatively provides for a State Advisory Council made up of one representative from each major health organization, i.e. State Medical Society, State Hospital Association, etc., and other agencies vitally interested in the standards of care provided in Nursing Homes. This Council shall act in an Advisory capacity only. The plan also provides for a State Accreditation Board which shall be made up of four elected members of the State Advisory Council and the three Nursing Home Administrators who represent the Nursing Home profession on the Council.

The purposes of the program are stated simply and

meaningfully in the Foreword to the Program. Those purposes are as follows:

To conduct a survey and accreditation program which will encourage the establishment and improvement of nursing homes and related facilities.

To recognize and encourage establishment of certain basic principles of organization and administration for efficient and kindly care of patients and guests.

To determine the maintenance of essential services through the coordination of efforts of the health professions and the administrators of said facilities.

To recognize compliance with standards by issuance of certificates of accreditation.

The evaluation of nursing homes will include close attention to the following items: The physical plant, the qualifications and education of the administrator, personnel policies, officer manager and administrator relationships. It also delves into medical and nursing care, records, restorative measures, the provision for proper care of drugs, and the products of the dietary department. Housekeeping, sanitation, and safety measures are also considered.

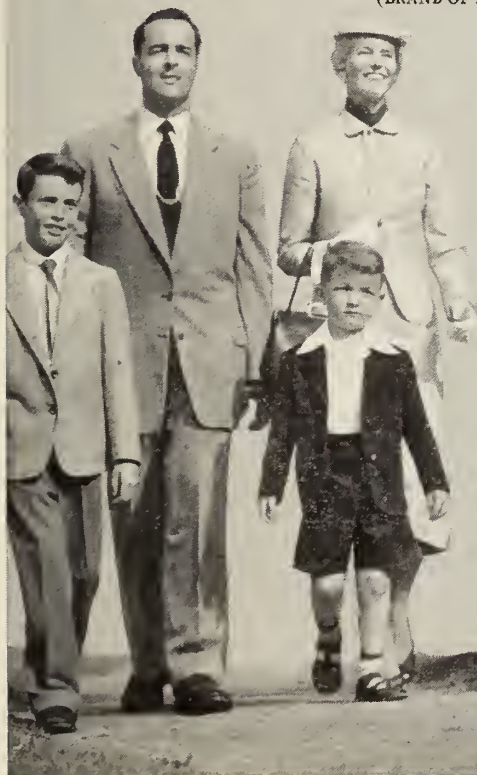
Nursing Home Administrators appointed to serve on the Volunteer Accreditation Committee by ANHA President Florence Baltz early in 1960 were professional Nursing Home Administrators with experience and training in various phases of the Nursing Home. Each member has had five or more years experience in the Nursing Home administrative field. Medicine, professional nursing, and practical nursing, were represented, as well as medical social work and business administration, in the background training and experience of the committee members.

Elmer C. Kocovsky, M. D. of Wauwatosa, Wisconsin, has served as Chairman of the Committee. Under Dr. Kocovsky's able and wise leadership the committee has accomplished a great deal in a relatively short period of time. Dr. Kocovsky's reappointment as Chairman of the Committee for 1961 has been announced by President-Elect Alton Barlow. Your reporter's reappointment has also been announced.

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of each patient as soon as the diarrhea is under control. Maintenance dosage may be as low as two tablets daily. Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is supplied as unscored, uncoated white tablets of 2.5 mg., each containing 0.025 mg. ( $\frac{1}{2400}$  grain) of atropine sulfate to discourage deliberate overdosage.

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# Book Reviews

*THE MANAGEMENT OF FRACTURES AND SOFT TISSUE INJURIES*, by the Committee on Trauma, American College of Surgeons, based on "Outline of Treatment of Fractures", seventh edition; and "Early Care of Soft Tissue Injuries", second edition, W. B. Saunders & Company, Philadelphia and London, 1960. 359 pages. Price \$5.00.

This small book is truly a compendium on the subject of trauma. In the most concise way, the entire scope of traumatology is covered. The illustrations leave something to be desired, but are relatively unimportant as related to the general content.

The reviewer considers this book "a must" for every medical student. Whether the individual be medical student, intern, general practitioner, general surgeon, or in any branch of specialized surgery, he should be conversant with the contents of this book.

Highly recommended.

Francis H. Gay, M. D.

*PROGRESS IN THE TREATMENT OF FRACTURES AND DISLOCATIONS 1950 - 1960* by Thomas B. Quigley, M. D. and Henry Banks, M. D. W. B. Saunders Company, Philadelphia, 1960. Pp. 102. Price \$2.50.

This is a short, well written and interesting compendium on the treatment of fractures and dislocations. The bibliography of 426 articles on these subjects covers a ten year period between 1950 and 1960. The book is primarily an analysis of significant articles in the literature over this ten year period. The authors draw conclusions as to the apparent most efficacious method of treatment of these various injuries. The recommendations are sound from an orthopaedic standpoint and generally represent accepted methods of treatment of the various injuries described.

This book is not simply a condensation of articles such as "The Year Book of Orthopaedic and Traumatic Surgery" but actually represents analysis of the bibliography by the authors who draw definite conclusions.

This book presupposes a fundamental knowledge of bone and joint surgery. I feel that it would be interesting and informative to all who are called upon to treat bone or joint injuries.

B. L. Freeman, Jr., M. D.

*BELOVED PROFESSOR: LIFE AND TIMES OF WILLIAM DODGE FROST*, by Russell E. Frost. Vantage Press, New York, 1961. Price \$3.75.

This is a rather long, detailed, and occasionally somewhat disjointed account of the life of William Dodge Frost, University of Wisconsin bacteriologist, active worker against tuberculosis, vigorous exponent

of public health, and engaging personality. The book traces his career from his very early days on the Minnesota prairie to the period of his eminence in Wisconsin affairs.

Written by the son of the subject, this book seems to be more suited to an audience of friends and connections, students and associates of Dr. Frost than it does for general medical readership.

JIW

*ILLUSIONS AND DELUSIONS OF THE SUPERNATURAL AND THE OCCULT*. D. H. Rawcliffe. Dover Publications, Inc., New York, 1960. Price \$2.00.

Scientific as we may think we all are, many of us have been puzzled by the apparently supernatural occurrences which have been reported over the years and which recur from time to time. While we have probably not accepted them as anything but natural explicable phenomena, we have not been aware of the mechanisms behind many of them and probably have harbored a little bit of doubt that perhaps there might, after all, be something extraordinarily puzzling. Even currently the experiments in extra-sensory preception, so called, and similar activities stir up a great deal of interest in the public and it is not unlikely even in our profession.

This book, published some time ago, has been brought out in an inexpensive edition entirely unaltered. It covers such subjects as hypnotism, crystal gazing, automatic writing, werewolves, fire walking, the Indian rope trick, and so on. Even if our scientific skepticism has kept us from thinking seriously about the occult basis for these phenomena, the book offers informative reading for all who have any interest in such matters. It is well printed and illustrated and offers at small expense a fund of fascinating information.

JIW

## OPEN HEART SURGERY

(Continued from page 118)

12. Thrower, W. B., Veith, F. J., Lunzer, S., Harken, D. E.: The effect of partial extracorporeal bypass on sodium excretion in normal dogs and in those with heart failure. *Surg. Gynec. & Obst.* 110:19, 1960.
13. Thrower, W. B., Darby, T. D., and Aldinger, E. E.: The effects of acid-base derangements on myocardial contractility effects as a complication of shock. (Presented to the Eighth Annual Scientific Meeting of the International Cardiovascular Society, June 11, 1960 in Miami. *Archives of Surgery* 82, p. 56, January 1961).
14. Thrower, W. B., Darby, T. D., Aldinger, E. E., Tenney, J. M., and Westbrook, S. H.: Studies of the relationship between sympatho-adrenal function, acid-base derangements and ventricular contractile force. *Surg. Forum* 10:535, 1960.



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### MAXILLOFACIAL SURGERY

CARTER P. MAGUIRE, M. D.

*Department of Surgery, Roper Hospital, Charleston, S. C.*

**M**axillofacial surgery is that segment of plastic surgery which applies to reconstruction of deformities of the facial bones. These deformities may be congenital such as in hemifacial atrophy where the superior and inferior maxillae are underdeveloped to varying degrees. The reverse side of the coin shows an opposing condition in which there is varying degrees of hypertrophy of the facial bones resulting from such conditions as cavernous hemangioma. The acquired deformities fall generally into two groups: 1st, traumatic and 2nd, post-therapeutic. The latter classification includes deformities produced as a result of destructive cancer surgery and other agents including x-ray and radium. This paper will be limited to the treatment of acute maxillofacial injuries. *Incidence:* We need not be reminded that accidents involving automobiles are common since we all must carry liability insurance at ever increasing cost. In the experience of many, the mandible is the most frequently fractured facial bone followed by the nose, the zygoma and maxilla.

*Diagnosis:* The diagnosis of a fractured facial bone is usually made clinically and confirmed by x-ray. Fractures with displacement involving the nose, the body of the mandible, the zygoma or the maxilla are frequently diagnosed by simple inspection. Palpation of the fractured part will reveal deviation from the normal. If one is enthusiastic enough, he can usually elicit crepitation by rubbing the bone edges together but this is not recommended. Fractures involving the mandibular condyles,

Maxillofacial surgery is that segment of plastic surgery which applies to reconstruction of deformities of the facial bones. An attempt is made in this paper to comment on the incidence and diagnosis of facial bone fractures due to trauma. A brief review of the anatomical landmarks of the facial bones is outlined with comments on the plastic surgical approach to fractures of each individual bone. Finally, a representative case report is presented with illustrations to outline the application of the principles enumerated.

the coronoid processes and rami are usually more likely to be overlooked. We will see why when we discuss the anatomy of this region.

*Nose:* The nose is composed of nasal bones, frontal processes of the maxilla and cartilage externally. (Fig. 1) Internally there is the perpendicular plate of the ethmoid bone superiorly, and the vomer inferiorly. Anteriorly the septum is composed of cartilage. These bones and cartilages join to form a pyramidal support, resting on the nasal septum, and thus furnish the structure over which the nasal skin is draped. Fractures involving the nose must be reduced and immobilized so that this normal contour will be re-established. Since there are no clinically significant muscles that attach to the nose, reduction is usually easy and immobilization simple.

*Zygomatic Arch:* (Fig. 1) The zygomatic arch extends from just in front of the external auditory meatus to the cheek bone. It is made up of the zygomatic process of the temporal bone,

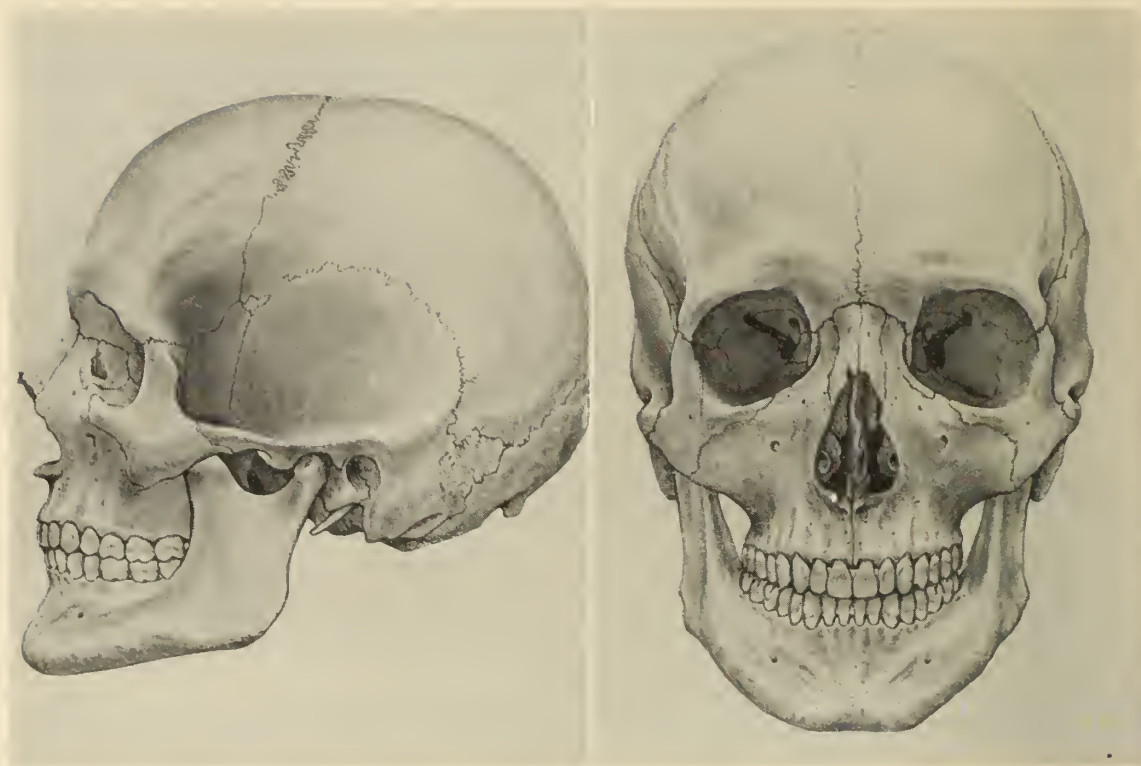


Figure 1

*Skeletal structure of the facial bones. Left, profile view. Right, front view.*

posteriorly, and the temporal process of the zygomatic bone anteriorly. It is seldom involved in a displaced fracture and is usually simply cracked inward and depressed into the temporal fossa. Although the powerful masseter muscle originates from this bone, this fact is seldom of any clinical significance. Reduction of this type of fracture using a towel clip through the skin of the face (the so-called "ice man's approach") is fraught with unnecessary risk of damage to the zygomatic and temporal branches of the facial nerve in addition to inviting hematoma formation from puncture of either the transverse facial artery or the artery of the masseter muscle or both. Many maxillofacial surgeons prefer the method originally described by Sir Harold Gilles who made a small incision in a shaved area of the temporal region of the scalp. Careful dissection identifies the temporal fascia which is incised. A curved joker is inserted through this incision and advanced with ease to the posterior surface of the zygomatic arch since the temporal

fascia (not the investing layer) inserts into this bone. Outward levering against a gauze roll and the application of a few sutures completes the procedure.

**Zygomas:** (Fig. 1) The zygoma which is commonly known as the cheek bone, forms a major contribution to the skeletal framework of the face. By its location, it serves as one of the most important protecting buttresses of the eyeball. It helps to house the maxillary sinus (superiorly and laterally), and it contributes to the support of the eyeball, in forming a portion of the orbital floor. For these reasons it is obvious that fractures involving this bone must be replaced and immobilized extremely accurately.

The zygoma is flat along its lower surface where it helps form the lower border of the zygomatic arch through its temporal process. Superiorly, it is concave forming the lateral half of the inferior orbital rim and essentially all of the lateral orbital rim. It also constitutes all of the lateral wall of the orbit. It articulates

with the frontal bone via its frontal process.

In fractures of this bone there is usually displacement inferiorly and sometimes impaction into the maxillary sinus. Treatment is directed toward replacement of the bone usually through an incision in the upper buccal sulcus. Isolated fractures of the zygoma usually have to be immobilized by open reduction and placing a retention wire across the superior fracture site which is usually at the zygomatico-frontal suture. As we will see, fractures of the zygoma are usually not single but are more commonly coupled with fractures involving the neighboring maxilla.

*Maxilla:* (Fig. 1) The word maxilla is derived from the diminutive form of "Malar" which makes it literally "the bone of the cheek that carries the teeth". Since the tooth bearing portion has a row of sockets, it is called the alveolus meaning "a small cavity". All in all, this bone of the cheek that carries the teeth is a horribly misshapened bony mass which unites with its fellow of the opposite side to fill the large void which would otherwise be present in the central third of the face. In addition to the alveolar process, there are the frontal processes which aid in the composition of the nose, the zygomatic processes which articulate with the zygoma and finally the palatine processes which form the roof of the mouth (along with the palatine bones). Since the maxillary sinus occupies the position of honor, this bone has often been described as a hole completely surrounded by very thin bone. It is important to remember that the roof of the maxillary sinus and the medial half of the floor of the orbit are synonymous terms for a very thin shaving of bone. Outside of ten or twelve muscles of facial expression, two or three palatal muscles and a couple of constrictor muscles of the pharynx, there are no important muscle attachments to this bone. By this, I mean that there is not likely to be any clinically significant distractive force pulling a fractured maxilla down, up or sideways.

Fractures involving the maxilla seem to follow no set pattern and vary from a loosened tooth to the dreaded transverse facial fracture. My apologies to Dr. LeFort who classified maxillary fractures neatly into three groups

but I am convinced that the accident prone citizens of Charleston County are not aware of his classification.

In restoring a fractured maxilla, where comminution is the rule, the restoration of the orbital floor and the re-establishment of dental occlusion, in my opinion, are of equal concern to the maxillofacial surgeon. Whether one uses a transantral approach or an open reduction through the lower eyelid makes little difference as long as the orbital floor is reconstituted sufficiently to support the eyeball. In cases of severe comminution it is sometimes necessary to substitute a bone or cartilage graft.

After reduction of the maxillary fractures, some method of immobilization must be provided. Some prefer to use plain stainless steel wires in the form of Ivy loops while others prefer the quicker arch bars which are simply bent to fit, cut to size, wired to the teeth and connected one to the other with small elastic bands. Thus the fractured maxilla is reduced and immobilized in a position of occlusion. There remains only the need for superior fixation of the maxilla to the base of the skull which can be accomplished by internal wire fixation in which the mandibulo-maxillary complex is supported by buried wires to some unfractured facial bone which lies above the fracture site. Some prefer to use external elastic traction by placing a Steinmann pin through the mandible and connecting this pin to lateral orbital pull-out wires or to a plaster head cap.

Finally, what to do with the all but amputated segment of alveolus? If the tooth roots are protruding through the fracture surface, complete the amputation. If they're not protruding, sew it back and hope for the best.

*Mandible:* (Fig. 1) The mandible forms the skeletal support for the lower third of the face. It is horseshoe shaped and literally extends from ear to ear. The central lower portion is tooth bearing and called the body. Standing almost straight up from the posterior edge of the body are the rami which are broad and relatively thin plates of bone reaching to the skull. Near their superior ends they divide into an anterior coronoid process and a



posterior condylar process. Between these processes lies a wide gap known as the mandibular notch. It is the condylar process that is capped by an articular surface which with the glenoid fossa of the temporal bone forms the anatomy of the temporomandibular joint.

Since the mandible is an arched bone which is semi-fixed in its lateral excursion, single, simple fractures are rare. The most common fracture would involve one molar area and the incisive foramen of the opposite side. Other fractures which are rather commonly seen would include those through the base of the condylar process, those through the molar area bilaterally and the triple fracture of the mandible involving both molar areas plus one fracture through the mental foramen. Fractures involving the ramus are quite rare as are fractures through the angle.

In reducing fractures of the mandible, a tug of war invariably develops between the fractured and displaced segment with its attached muscles and the plastic surgeon armed to the teeth with pliers, wires and determined desires. In the usual uncomplicated case with a cooperative patient (that is, someone who has a full head of teeth), the application of arch bars and the establishment of intermaxillary elastic traction usually suffices. Cases that have a stubborn posterior toothless fragment usually require open reduction, hole drilling and wiring across the fracture line at the lower border of the mandible. Immobilization for 30 to 40 days could be expected to produce firm healing. The elastic bands are removed at that time and an attempt is made to produce motion at the fracture site. Any evidence of movement should prompt the surgeon to convince the patient that two additional weeks of fixation are really not so bad after all. One doesn't look for the x-rays to be of any help at this stage because visible callous doesn't form on the mandible and the friendly roentgenologist usually reports "no evidence of healing. There remains a wide separation . . .", etc.

In uncooperative patients with a toothless head or only a few pegs but who have a nicely fractured mandible, one is tempted to use the approach of the disgruntled plastic

neophyte who barked at one such patient, "Why did you have to go and fracture your damn jaw? You're not equipped for it". If the patient has dentures they can be used as intermaxillary space retainers coupled with circumferential mandibular wires which in turn are attached to the nasal spine of the maxilla or to the lower edge of the frontal process of the maxilla. Another dismal facet is that the dentures which are usually in the patient at the time of injury are thoroughly masticated, extruded and lost in the bushes. The prudent house officer by watching the stool and beating the bushes soon has his space retainer reconstructed while a less resourceful colleague must construct a Gunning type splint to serve the same purpose.

Fractures of the molar region of the mandible usually produce inward and upward displacement of the posterior fragment due to the pull of the internal pterygoid muscle and the temporalis muscle respectively. The mylohyoid and digastric muscles tend to distract the anterior fragment downward. On the outer surface of the mandible, the masseter is assisting in the upward displacement while the platysma is helping to depress the anterior fragment. In fractures across the base of the condylar process, the condyle is usually displaced inward because of the pull of the external pterygoid muscle. Displaced condyles in children should be replaced since they carry one of the principal growth centers of the mandible. In adults, the condyle should be immediately removed, left alone or reduced by open reduction, depending upon which book you read. I prefer to leave it alone unless it causes pain, in which case it can be quite simply removed. Although this sounds like a crippling procedure, the patient is quite well following it and with the exception of a slight cross bite, can occlude the teeth normally. Sometimes, a little judicious grinding by the dentist will be of help.

*Case Report:* This case is considered to be about as typical as possible of severe maxillofacial trauma. It involves a 23-year old white female who was badly injured in an automobile accident on June 25, 1958. The fractures of her ankle and clavical were handled by an orthopedic surgeon. This presentation deals with the handling of the facial trauma.



Figure 2

Operating room view of severe maxillofacial injury involving the maxillae, zygoma, orbits and nose, June 25, 1958.

The injuries were multiple — including an extensive laceration of the lower lip, neck and cheek. (Fig. 2). There was an extensive laceration of the right upper

eyelid and forehead. Fractures of the facial bones included the left orbit, maxilla, left zygoma, nose, palate and right zygoma. The mandible was not fractured.

Initially, a tracheostomy was performed and the injuries were repaired as shown in Fig. 3. The suspensory wires were attached by elastic traction to the mandibular Steinmann pin.

The suspensory apparatus was removed on August 1, 1958. Subsequently, the patient had a corrective rhinoplasty and surgical planing of the facial scars with the final result shown in Fig. 4.

**Summary:** The anatomy of the skeletal structure of the facial bones is briefly reviewed with comments on the plastic surgical handling of facial bone fractures. An illustrative case report is presented.

**Acknowledgements.** I would like to acknowledge the kind permission to reprint Fig. 1 from "Detailed Atlas of the Head and Neck", R. C. Truex and C. E. Kellner, published by Oxford University Press, Inc., New York City. I should also like to acknowledge the aid and assistance so generously given by Mr. and Mrs. Robert Brown, Directors of Medical Illustration, Medical College of S. C.



Figure 3

Patient four weeks after accident. Superior elastic traction has been established to immobilize the floating maxilla against the base of the skull. The teeth are fixed in occlusion. Right, front view. Left, profile view.



Figure 4

*Final result. Taken four months after injury. Right, front view. Left, profile view.*

*Transmetatarsal amputation.* G. B. Bradham, M. D., W. H. Lee, M. D., and J. M. Stallworth, M. D. (Charleston) *Angiology* 11:495, Dec. 1960.

Thirteen patients are presented who exhibit 15 transmetatarsal amputations for ischemia of the distal foot. These patients are subjected to critical analysis including pre- and post-operative hospitalization time, number of total surgical procedures, relative incidence of diabetes, etc.

It was found that in the 13 patients showing 15 ischemic extremities, a total of 46 surgical procedures were done prior to final discharge. Of the 15 transmetatarsal amputations done, 8 resulted finally in below-knee amputation. Mean hospitalization time was 49 days.

These figures are compared to statistics from the literature.

*Natural History of Strawberry Nevus.*—Study of 169 untreated strawberry nevi showed that complete spontaneous resolution occurred in approximately 50% by the age of 5 and in 70% by the age of 7. Of those which did not resolve completely by the latter age, many improved greatly and only about 6% constituted any cosmetic handicap. Further improvement was not uncommon in subsequent years. In this trial no nevus extended after the age of 12 months and not one did any serious damage. With the possible exception of lip lesions, the authors were not able to distinguish a type of strawberry nevus which in prospect was particularly unlikely to resolve. A number of factors including site and size were studied in this connection. The presence or absence of expansion in early life was not an infallible guide to prognosis.

*Arch. Derm.* 82:819



# PROBLEMS IN MANAGEMENT OF ACUTE TRAUMATIC NONPENETRATING CHEST INJURIES

E. M. COLVIN, M. D. AND

J. V. JEFFORDS, M. D.

Spartanburg, S. C.

## *I. Introduction*

**T**he highly developed state of motorized transportation in this country with increasing numbers of automobiles has markedly increased the number of acute chest injuries admitted to the average general hospital during the past few years. These injuries vary from steering wheel trauma to penetrating wounds of the thoracic cage in individuals thrown from automobiles moving at a rapid rate of speed. Etiological factors in automobile injuries in general have been studied and recommendations made by the committee on trauma of the American Medical Association. The management of these injuries is the responsibility of the individual physician and surgeon as he sees the patient in the emergency room. The purpose of this publication is to discuss some of the problems that present themselves in the management of the more common non-penetrating traumatic chest cases that we have seen.

## *II. Case Presentations and Discussion*

1. Patient M. D., Hospital No. 165067. This 56 yr. old white male was admitted to the Spartanburg General Hospital on the 15th of May, 1959, with a history of having been injured in an automobile accident. At the time of admission, he was markedly disoriented, lethargic, and had several episodes of nausea with vomiting immediately after arrival on the ward. The patient's level of consciousness remained stable but somewhat lowered during the next two days, and a spinal tap revealed a normal spinal fluid pressure and bloody spinal fluid. The patient's sensorium gradually cleared, and on the fifth day following admission, he began to complain of chest pain. Although percussion and auscultation of the chest was normal, an upright chest x-ray film revealed multiple incompletely healed rib fractures on the right. The chest pain was easily controlled with aspirin and codeine so that intercostal nerve block was not required. Repetition of the chest roentgenogram failed to show any evidence of pneumothorax or hydrothorax, and the patient was discharged after his sensorium cleared on the 2nd of June, 1959. Since his discharge, the patient has remained asymptomatic, and his cerebral concussion has cleared.

This is a collection of case reports of various types of traumatic chest injuries treated in the past few years at Spartanburg General Hospital. A discussion of some of the problems in diagnosis and management of these patients is presented. Emphasis is made on early recognition of injuries to the chest and on vigorous treatment before more serious complicating factors become involved. The frequent occurrence of chest injuries in association with multiple other injuries is also stressed. Several x-ray films of illustrative cases are also presented.

This case illustrates the presence of multiple severe rib fractures without the common complications which frequently occur. In most cases, the most troublesome factor when complications are not present is severe pain. This is usually controlled with narcotics or analgesics in moderate dosage so that the respiratory function is not seriously impaired. We believe that intercostal nerve blocks with 1% procaine offer a definite advantage over strapping the chest with adhesive plaster. The procaine block should be performed as soon after injury as possible and includes one or two ribs above and below the fracture sites. A canvas splint to limit painful motion is also used occasionally, but this has the disadvantage of preventing deep respiration and limiting respiratory excursion on the opposite and normal side of the chest. Persistent intercostal neuralgia may require intercostal neurectomy or exploration and resection of the callus. This is a late complication, however, and is rarely necessary. The complications commonly encountered in rib fractures are subcutaneous emphysema, pneumothorax, hydrothorax, or hemothorax, contusion of the lung, traumatic pneumonitis and atelectasis. Some of these will be discussed in detail later.

2. Patient W. O., Hospital No. 160806. This 44 yr. old white male was admitted with a history of having

been injured in an automobile-truck collision. When he was seen in the emergency room, he had marked subcutaneous emphysema and severe pain in the left side of the chest and in the left hip. The patient was in severe respiratory distress, and breath sounds were absent over the left lung. After thoracentesis had revealed a tension pneumothorax, a tube thoracotomy was performed in the emergency room. Lacerations of the left elbow and both legs were repaired in the emergency room. The patient was admitted and placed in Buck's traction to the left leg after a roentgenogram showed dislocation of the left hip and also a fracture of the head of the left femur and left acetabulum. A minimal degree of paradoxical motion of the left chest wall was treated with sandbags and rolled sheets. On the 25th of February, 1959, the dislocated hip was reduced under general anesthesia, and at the same time, a second tube thoracotomy was performed in order to replace the original intrapleural tube which was no longer functioning.

The thoracotomy tube was removed after the lung was almost completely expanded, but because of loculation of the fluid, repeated thoracenteses were performed. The patient was started on crutch walking on the 16th of March, 1959, and was discharged to be followed in the office on the 18th of March, 1959. Chest x-ray film prior to discharge indicated almost complete re-expansion of the left lung with some evidence of pleural thickening.

The above case illustrates the presence of multiple fractured ribs complicated by the presence of tension pneumothorax and multiple skeletal injuries. Since this patient was in acute distress at the time of his admission, it was necessary to insert immediately a closed thoracotomy tube with underwater drainage. We would like to point out that thoracentesis was performed first to determine definitely the presence of tension pneumothorax. An attempt to re-expand the lung by aspiration should be attempted in most cases. The patient's hospital course illustrates the problem of maintaining adequate drainage through one of these tubes. The re-insertion of a second thoracotomy tube allowed almost complete re-expansion of the lung, and in this case, negative suction was necessary to supplement underwater drainage. The immobilization by the application of Buck's traction for the injured hip possibly prevented earlier motion and prolonged the atelectasis.

In severe cases of paradoxical motion, external fixation is required.<sup>1</sup> Tracheotomy has also been found to help greatly in treating this type of injury when the respirations are

greatly impeded.<sup>2, 7</sup> Unless the degree of flail chest is severe, we have found the use of bed rest supplemented by sandbags satisfactory for moderately severe paradoxical respiration.

3. Patient R. M., Hospital No. 149268. This 14 yr. old colored male was admitted following a pedestrian-automobile injury on the 24th of June, 1958. On admission, the patient had x-ray examination which revealed fractures of the 5th, 6th, and 7th right ribs and subcutaneous emphysema on the x-ray film. Forty-eight hours later, when he was first seen in consultation, he was noted to have a temperature of 103° F. and decrease in breath sounds over the right side of the thorax. X-ray revealed pneumothorax on the right with 30% collapse of the right lung and mediastinal shift. There was also evidence of a pneumonitis and atelectasis in the left lung. The patient was started on CO<sub>2</sub> inhalations, aerosol therapy, and antibiotics. Thoracentesis produced a negative pressure in the right chest, but x-ray films on the following day showed 50% collapse of the right lung. A closed thoracotomy was performed on the 28th of June. Within forty-eight hours, the lung had completely re-expanded as shown by x-ray, and the thoracotomy tube was removed. Another x-ray film prior to discharge revealed a normal lung with no evidence of pneumothorax. The patient's subsequent course and recovery was uneventful.

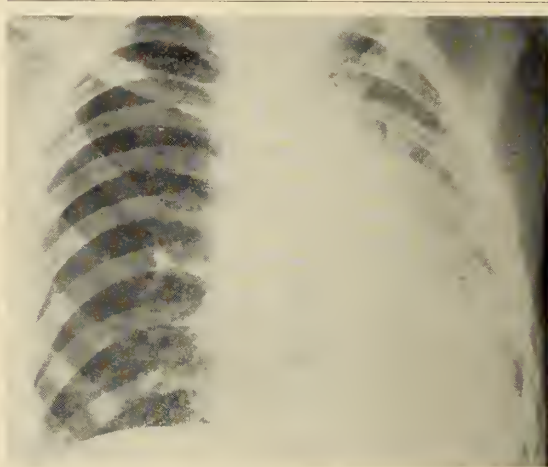


Figure 1

*Case R. M. Film taken 48 hours after rib fracture shows right pneumothorax with tracheal shift to the left and atelectasis with pneumonia in the left lung. Fractures of the right 5th, 6th and 7th ribs were present. Re-expansion of the lung by underwater drainage corrected the pathologic physiology present.*

This case illustrates the complication of multiple rib fractures with a severe pneumothorax as noted in the previous case but with a delayed onset. This delay in onset lulled the attending physician into a false sense of security and allowed progression of atelectasis



and pneumonia in the opposite lung. We believe that repetition of the chest x-ray examination within the first six to twelve hours following the demonstration of subcutaneous emphysema in rib fracture cases is desirable. The use of wetting agents and hyperventilation procedures in cases such as this aids considerably in decreasing the morbidity of atelectasis and pneumonitis.<sup>3</sup> Frequently, in contrast to the above case, multiple thoracenteses will suffice in the treatment of delayed pneumothorax. We believe that the use of thoracentesis decreases the incidence of infection and prevents the post-operative pain seen in the usual closed thoracotomy with insertion of the drainage tube. Unless the lung is more than 15% collapsed, we believe that close observation with multiple serial chest films is a satisfactory method of management.

4. Patient B. C., Hospital No. 146562. This 15 yr. old white female was admitted on the 3rd of May, 1958, with a history of having been injured in an automobile accident on the day of admission. When the patient was seen in the emergency room, she complained of shortness of breath, severe pain in the left shoulder, and pain in the left scapular region. Chest x-ray films in the emergency room showed a hemopneumothorax on the left. Thoracentesis immediately after admission produced 300 ml. of bright red blood and 800 ml. of air with marked relief of respiratory symptoms. Chest x-ray film on the 5th of May indicated full expansion of the left lung with a small amount of fluid in the pleural space. A subsequent film within the next 48 hours revealed a 15% collapse of the left lung with some increase in the amount of fluid present. When another serial film showed approximately 25% collapse of the lung, another thoracentesis was performed with removal of serosanguineous fluid and air. Because of the persistent reaccumulation of fluid and air, a tube thoracotomy was performed on the 13th of May and the tube connected to underwater drainage. The lung subsequently expanded completely and remained expanded as shown by x-ray following removal of the tube. The patient's pain was easily controlled with the use of aspirin and small dosages of Demerol.

This case illustrates the presence of post-traumatic pneumohemothorax, following multiple fractures of the ribs. Again, the apparent satisfactory response after thoracentesis allowed a delay in the insertion of the thoracotomy tube. This patient's subsequent uneventful course again reaffirms a non-operative method of treatment of hemopneumothorax. We believe then in very few cases of

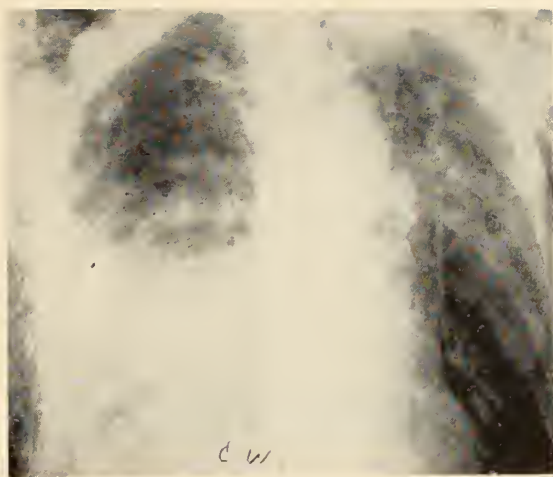


Figure 2

*Case C. W. Film taken on admission reveals massive subcutaneous emphysema, multiple fractured ribs on right, and right tension pneumothorax. After treatment with underwater thoracotomy tube drainage, tracheotomy, and oxygen with aerosol therapy, the lung re-expanded and chest film cleared.*

hemothorax is surgical intervention necessary.

5. Patient C. W., Hospital No. 147102. This 59 yr. old white male was admitted to the Spartanburg General Hospital shortly after an automobile accident on the 14th of May, 1958. When the patient was seen in the emergency room, he was in severe respiratory distress with the clinical findings of a massive subcutaneous emphysema. Chest x-ray film was of poor quality but was felt to show a collapse of the right lung due to a tension pneumothorax with multiple fractured ribs on the right. An immediate closed thoracotomy was performed following a thoracentesis which confirmed the impression of a tension pneumothorax. Because of the severe degree of respiratory distress following admission, an emergency tracheotomy was performed in the bed. Again, mild paradoxical respirations were satisfactorily controlled with the use of sand-bags to the chest wall. X-ray film on the following day revealed some interstitial bleeding of the right mid and lower lung fields, but with satisfactory re-expansion of the right lung. Patient improved on antibiotics with the use of wetting agents and oxygen. The thoracotomy tube was removed on the 2nd of June, after most of the subcutaneous emphysema had subsided. A recurrence of the pneumothorax necessitated the use of a second underwater drainage thoracotomy tube. Reinsertion of this tube allowed complete re-expansion of the right lung and subsequent clearing of the chest cavity on x-ray occurred. Before discharge on the 18th of June, 1958, it was obvious that this patient had a rather severe degree of pulmonary fibrosis which was undoubtedly present before the accident and contributed to the degree of respiratory distress. This patient also had evidence of bilateral apical infiltration which has proved to be of a static nature on



subsequent follow-up chest films. This patient is now back at work in the mill at his previous employment.

This case illustrates the problems encountered in an elderly patient with a massive subcutaneous emphysema together with a tension pneumothorax and limited pulmonary reserve. Of course, the initial step in the treatment of this situation was insertion of a thoracotomy tube in an effort to regain as much lung function as possible. The use of the tracheotomy made tracheal toilet easier, increased the efficiency of wetting agents used, and decreased the amount of dead air space, and lessened the amount of physical work involved in respiration. Tracheotomy incision also served as a possible decompressing incision for any mediastinal emphysema which could not be detected due to the massive subcutaneous air collection distorting the clinical picture. This case also illustrates a definite parenchymal lung injury. This patient had contusion of the lung with patchy areas of intrapulmonary hemorrhage, giving the picture of traumatic pneumonitis.

The management of a patient such as this consists primarily of rest with the use of antibiotics to prevent lung infection with careful attention to the patient's respiratory efforts and his ability to maintain a clear tracheobronchial tree. In patients such as this, there is a definite loss of functioning lung tissue, and function is further impaired by the secretions of blood and mucous which are usually present in varying amounts following such an injury. These patients require measures to take care of this secretion. If they have an effective cough and are able to cough for themselves, this is, of course, preferable. However, in some instances, it is necessary to use such measures as intratracheal suction and tracheotomy to clear the tracheobronchial tree adequately. The use of steam inhalations and aerosol therapy are considerable adjuncts to treatment in this regard. It is also necessary in some instances to use oxygen either nasally or by tent. The use of a tent is preferable, particularly if one of the wetting agents is to be used. It must be remembered that this condition is very frequently associated with other chest injuries and must be considered along with other

injuries which, at the time, may seem more serious.

6. Patient G. H., Hospital No. 120035. This 17 yr. old white female was admitted to the Spartanburg General Hospital on Nov. 24, 1956 suffering with injuries which she had received in an automobile accident shortly before. Her injuries were quite severe and consisted of a rather marked degree of cerebral concussion and contusion, a basal skull fracture on the left side with 6th and 7th cranial nerve damage, fracture of the left 8th rib and traumatic pneumonitis on the left. She subsequently developed considerable precordial and left sided chest pain which was attributed to traumatic pericarditis and mediastinal emphysema. It was necessary in this patient to do a tracheotomy shortly after admission to provide an adequate airway for her. This was done primarily as treatment of her head injury, but it certainly was a helpful adjunct to treatment of her chest injury. She had a rather long hospital course with steady improvement and was able to be discharged in good condition on Dec. 21, 1956. Her subsequent course was satisfactory.

This case illustrates severe chest injury associated with other injuries which, at the time, were actually more immediately serious. The patient had rib fracture with mediastinal emphysema and traumatic pneumonitis and traumatic pericarditis. One of the main problems in a case such as this was the recognition of the chest injury in view of the severe cerebral damage which was present. We received considerable help from our internist consultant in both the recognition of the injury and in the treatment. The treatment consisted essentially of supportive treatment with adequate clearing up of her tracheobronchial tree and the use of antibiotics. In this patient, the early use of tracheotomy was felt to be a life-saving procedure both from the standpoint of her head injury and her chest injury. We would like to re-emphasize the importance of recognizing the possibility of cardiac injury in any patient who has been involved in an accident and has received a blow in the chest region. We feel that one should have competent consultation, from an internist or cardiologist on patients with cardiac damage.

## *II. Discussion and Summary*

A limited number of cases of non-penetrating thoracic injury have been presented together with a discussion of some of the problems that they offer. No attempt has been

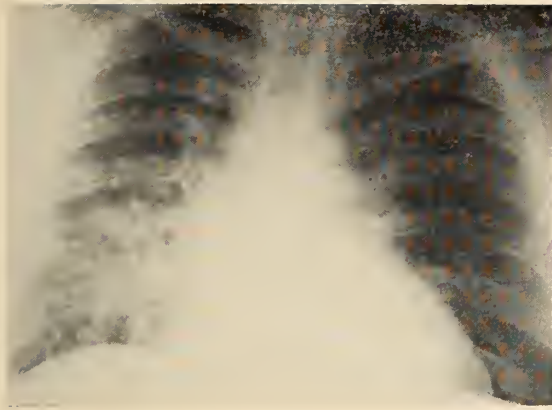


Figure 3

Case R. F. X-ray film taken on admission reveals intrapulmonary hemorrhage without lung laceration or pneumothorax. Patient responded to use of oxygen, aerosol therapy, and antibiotics. The film cleared in two week period.

made to include all of the possible injuries of this type that may occur. We have presented only those cases which have been treated by us recently and which, we believe, are repre-

sentive of the more common closed type chest injuries.

The basic principles in treatment of chest trauma have been outlined and presented in more complete form in this journal.<sup>4, 5</sup> The more complicated forms of blunt trauma intrathoracic injury have been discussed by Forsee and Blake.<sup>6</sup> Some of these injuries include rupture of main stem bronchi, traumatic aneurysm, rupture of the esophagus, and rupture of the diaphragm or heart.

We would like to stress the advantages in conservative management of closed chest injuries by the use of external immobilization of mobile rib fractures, the use of intercostal nerve blocks in the earlier stages for fracture pain and a canvas rib splint for the later rib immobilization. We believe that the use of thoracentesis, closed thoracotomy with underwater drainage, and open thoracotomy—in that order—is indicated for the treatment of significant pneumothorax and hemothorax.

#### REFERENCES

1. Craighead, C. C., and Glass, B. A.: Management of non-penetrating wounds of the chest. *J.A.M.A.* 172:1138, 1960.
2. D'Abreu, A. L.: *A Practice of Thoracic Surgery*. 2nd ed. London, Edward Arnold, 1958.
3. Levine, E. R.: A more direct liquefaction of bronchial secretion by aerosol therapy. *Dis. Chest* 31: 155, 1957.
4. Parker, E. F.: Basic principles in the treatment of intrathoracic injury, *J. South Carolina M. A.* 43: 299, 1947.
5. Levi, W. M.: The emergent management of thoracic trauma. *J. South Carolina M. A.* 56:49, 1960.
6. Forsee, J. H., and Blake, H. A.: The recognition and management of closed chest trauma. *S. Clin. North America* 38:1545, 1958.
7. Colvin, E. M., and Morrison, W. M.: The value of tracheotomy in acutely ill surgical patients. *Surg. Gynec. & Obst.* 96:338, 1953.

*Anesthesia for cleft lip and cleft palate surgery.* John E. Mahaffey, M. D., J. Henry Sprouse, M. D., S. M. Witherspoon, M. D., and Claudia Oxner, M. D. (Charleston) *Plast. & Reconstruct. Surg.* 26:596, Dec. 1960.

Maintenance of an adequate ventilatory airway and a method of tracheal aspiration represent the major anesthetic problems associated with cleft lip and cleft palate surgery. In a small series of 91 cases performed at the Medical College Hospital, Charleston, South Carolina, endotracheal anesthesia has been utilized to accomplish these desirable features. Inhalation agents are administered via a nonbreathing valve or an infant circle.

A comparative study was conducted of the anesthetic agents employed in this series, consisting of nitrous oxide-ether, nitrous oxide-Fluothane, and nitrous oxide-Pentothal. The recovery period was noted to be significantly shortened in those patients receiving nitrous oxide-Fluothane.

Other related problems are discussed, and methods

of management considered.

*Evaluation of isothipendyl hydrochloride (theruhistin) in some common pruritic dermatoses.* Kathleen A. Riley, M. D. (Charleston) *Ann. Allergy* 18:420. (April 1960).

Isothipendyl hydrochloride (Theruhistin) is of value in the treatment of allergic and pruritic dermatoses because the dosage can be safely increased to achieve maximum effect with minimum side effects.

*Mid-facial contour in patients with cleft lip and cleft palate.* Robert F. Hagerly, M. D., and Milton J. Hill, M. S. (Charleston). *Pediatrics*, 26:387 (September, 1960)

It would appear that conventional palatal surgery can be carried out before the end of the second year of life without detriment to the facial contour, and with maximal opportunity for the development of good speech. It is most important to effect a loose lip-closure to obtain a more normal facial contour.

# FUNCTIONAL CONSTIPATION

W. CLOUGH WALLACE, M. D.\*

Greenville, S. C.

**F**unctional constipation is an intermittent or constant abnormal retention of fecal matter in the intestinal canal or an undue delay in discharge of excreta from the rectum which can be ascribed to neither an organic lesion nor a non-neurogenic constitutional disorder.

It is evident that such a diagnosis can be made only after diligent study has ruled out all other causes.

I have chosen to review this subject because of its pertinency to all physicians, but especially to those who have the willingness to devote the time, study and patience necessary to handle this problem.

Neurologically it is of interest that the right half of the colon receives its sympathetics from the lower six thoracic segments via the celiac plexus and its parasympathetics probably from the right vagus nerve, giving a similarity of enervation to that of the upper gastrointestinal tract. The left half of the colon and the rectum, internal sphincter and, bladder and sexual organs similarly have a common lumbosacral autonomic nerve supply. The enervation below the dentate line is certainly somatic via the inferior hemorrhoidal nerves.

A few points on function are of interest: 1. When the small bowel is most active the colon is quiet; 2. Most absorption takes place in the cecum and rectum; 3. The average stool contains 70 to 100 ml. of water and 30 to 40 grams of solid; 4. Most of the 500 ml. of fluid that reach the colon daily from the small bowel has been removed and the waste formed into rounded masses at the hepatic flexure; 5. There is some evidence that considerable fluid excretion into the colon may take place in the left half, but it is not known that this is normal; 6. Movement in the transverse colon is slow except for the two or three mass movements a day, thought to be due to a gastro-colic reflex, which pushes a bolus of stool into the

The author presents a general outline of functional constipation as seen in general practice with the present conceptions of etiology, diagnosis and treatment. He presents a few ideas of his own, but makes no effort to cover the organic causes of constipation or to go into great detail. His object being to cover a wide field of basic ideas and principles in order to lay the groundwork for appreciation of the problems involved in diagnosis and treatment and the necessity for allowing adequate consultation time to establish a firm patient-physician relationship.

descending colon like bumping off freight cars onto a railroad siding, so that some one of these rushes forces a bolus into the rectum to give rise to the call to defecate; 7. In those who have a stool after each meal each rush may result in a call; 8. The rectum probably should be empty except just before defecation, although I find many people with more or less feces in the rectum without symptoms; 9. The external sphincter muscle does not lose its tone during defecation, which may explain in some degree why women, who exert a pressure of 100 to 150 mm. of mercury on straining, have a greater history of constipation than do men, who exert 240 to 280 mm. of pressure; and 10. There appears to be a center for defecation near the vomiting center in the medulla.

*Functional constipation* may be divided into simple constipation and true colonic neurosis.

The causes of simple constipation, such as inadequate intake of food, ingestion of very low residue foods, lack of normal drive due to poor conduction (frequently seen in upper gastrointestinal disease), long colons with slow movement and excessive drying and the very ill or aged patient with poor muscle strength and general hypotonia, are eliminated from this discussion.

*Chronic laxative abuse* is a very common cause of the complaint of constipation. It

\*Revision of a paper read before a meeting of the Piedmont Proctologic Society, 19 March 1960, Raleigh, N. C.



arises from the old, old idea that a weekly purge is beneficial and from failure to realize that after cleaning out the whole colon it takes from two to four days for stool to reach the rectum again. Similar propaganda for the necessity of a daily stool prompts additional laxation for this self-induced constipation. Soon comes the history, "I have to take a laxative every night to have a stool." These habitual laxative-users finally come to the point where a liquid, irritating stool is needed to provide the urge for defecation.

When discovered in childhood, treatment consists in withdrawal of the laxative and assurance to the mother that a stool every few days is in no way detrimental to the child's health.

In later stages, it is my impression that actual damage has been done to the receptors in the gut, resulting in loss of tone and sensitivity. Sara Jordan<sup>1</sup> felt that these bowels had been whipped to exhaustion and required rest. In this phase treatment consists of a regular diet combined with hydrophilic colloids, cooked fruit twice a day, adequate fluids and bowel-habit training. Sara Jordan did a daily digital rectal on her patients. If a stool was found a small plain-water enema was given to empty the rectum, otherwise the patient was allowed to go until a stool did appear in the rectum. I find this plan impossible to follow, so my patients are instructed to go to stool at a regular time after breakfast or in night-workers after the first meal following arising. If there is no stool in two days, a plain-water enema of six to twelve ounces is taken. If no stool is produced, enema is repeated every two days until a stool is obtained.

With this regimen and as much personal reassurance and supervision as possible most of these patients will join the regulars. Those who do not, probably lack faith in their physician or fail to follow orders.

*Voluntary constipation* arises from inadequate toilet facilities in public places and one-bathroom homes, unwillingness to take time to go, or pressure of work that dictates postponing defecation.

In the beginning it is probable that the rectal feces are passed back into the colon by

retro-transport, giving loss of urge, but eventually feces will remain in the rectum without urge and impaction may develop.

The treatment of impaction is its removal by any means found necessary. With or without this complication, the treatment of voluntary constipation consists in insistence that the call be answered promptly and that enough time be allowed to do a good job. Sometimes using a low chamber or a footstool in front of the toilet, giving a natural squatting position, proves beneficial. Here again some training with small plain-water enemas may help establish a regular going time. It is one of the few conditions in which I feel mild laxatives for a short period have value.

*Dyschesia*, or inability to empty the rectum, is the final simple functional constipation and apparently depends on some lack of sensitivity or failure of the lower portion of the rectum and anus to complete the defecatory reflex. It is probably a primary defect and does not arise from organic lesions of the anorectum.

Dyschesia begins at or shortly after birth and continues throughout life. There is a long history of laxatives with poor results, enemas and impactions. The colon fills with feces and dilates, the rectum is very large and filled with stool. The finding of feces in the rectum essentially rules out congenital megacolon, but rectal biopsy is the final test. These patients exhibit a protruberent abdomen like that of congenital megacolon, they are sluggish and they have a sallow or unhealthy appearance.

*Treatment* has not been very successful in the past, but cleansing enemas, oil retention enemas, colonic irrigations and violent purges were used for palliation.

I have treated two patients with dyschesia for over a year with results I feel warrant reporting, though neither has been cured:

D.P., an unmarried white male student, age 21, had the usual history, appearance and immense colon on examination with x-ray. On 26 March 1959, anesthesia, manual removal and numerous colonic irrigations were required to empty him. After palliative daily enemas for two weeks he was started on a contact colon stimulant Dulcolax (bisacodyl) two tablets at night and one in the morning in addition to the enemas. By the first of May he had had several stools without enemas and an x-ray film showed some feces in the colon, but good tone and less dilatation. Dulco-

lax was then reduced to one night and morning and the enemas to one every two days. He left town for the summer, but reported on 15 July that he was happily married and was having a stool nearly every day, needing only an occasional enema. He was not seen until 29 February 1960 when he reported that he had stopped Dulcolax and enemas three months previously and was having a very large stool every two or three days. He also reported that he had developed some sense of stool in the rectum, but no real defecatory urge. Findings on physical examination were essentially normal, but I urged that he continue to take a Dulcolax tablet each night and also placed him on liothyronine 25 mcg. daily for its tonic effect. He reported in June 1960 that he was doing fine, but appeals for him to have a colon x-ray picture were not heeded.

N.H., a white male, age 11, was seen 9 April 1959 with a typical history and appearance and a request that he be checked for a rectal tumor diagnosed by x-ray. This was a scybalous fecal mass lodged above a broad rectal valve in a dilated rectum. Treatment with 15 ml. of standard cod liver oil three times a day and a daily three-pint plain-water enema was begun. A roentgenogram on 25 May showed good emptying of a still very dilated colon. Dulcolax, two tablets each night, was begun and the enemas ordered on days he had no stool, but every two days regardless. By 16 July 1959 he was taking one Dulcolax tablet nightly and having daily stools without enemas. On 29 December 1959 5 mcg. of liothyronine three times a day was started for its general tonic effect. I can not report on the benefits of the liothyronine, but the patient's appearance was that of a normal American boy in July 1960, at which time he was having good results with one Dulcolax tablet every other night and an enema once a week.

I feel that the use of Dulcolax for over a year in two patients has proved beneficial and not detrimental in treating dyschesia. Its trial is recommended.

The irritable, spastic or unstable colon is probably a true *colonic neurosis*, presumably due to a generalized autonomic derangement activated by or reinforced by psychogenic and constitutional factors, fatigue, endocrine changes and possibly allergy. It is present in at least 18 per cent of patients seen by gastroenterologists and in probably 10 per cent of the general population. Women are affected twice as often as men. Symptoms are usually first complained of at about 20 years of age, but might occur much later. The average age when first seen for study is 38 years.

The chief symptoms are colonic dysfunction and lower abdominal distress. Constipation may be constant or interspersed with periods

of normal stools, without symptoms, or loose stools, with symptoms, but there is no regularity of remission or recurrence such as occur in duodenal ulcer.

The discomfort may be described as a dull ache or a sense of pressure or weight in the abdomen, and may last for minutes to days or months. There are cramping and griping pains at times, especially in severe attacks, but the discomfort seldom interferes with sleep, even when described by the patient as intolerable and incapacitating. Epigastric distress is frequently complained of, and a distended, bloated feeling, with audible borborygmus, is common.

When first seen by the proctologist or the gastroenterologist, one-third have had surgery for appendicitis because fever may make it hard to rule out, and one-fifth have had a cholecystectomy or undergone pelvic operations for concomitant functional dysmenorrhea without benefit.

The history will reveal initiation or aggravation of symptoms by neurogenic stress due to shock, worries, inadequacies, fear, sorrow or environmental unpleasantness. There is often aggravation in the premenstrual period and it is typical at the menopause. Fatigue, cold, weakness following illness and painful abdominal crises, such as renal colic, reinforce attacks, as do indulgence in tobacco, coffee, tea, roughage, high seasoning and diets high in fats. Laxatives and irritant enemas are not tolerated. Concealed hypothyroidism or hyperthyroidism may be exciting factors, and allergy must be suspected in patients with a history of intolerance to specific foods.

Physical examination will show a palpable and tender descending and pelvic colon. Borborygmus and hyper-peristalsis are often noted, but distention is not usually present. Proctologic examination shows an empty rectum of normal size and probably increased sphincter tone. Sigmoidoscopy will rule out other diseases and frequently confirm the sigmoid spasm or reveal scybalous pellets in the sigmoid colon. It may even reproduce the patient's symptoms. X-ray examination of the upper gastrointestinal tract and colon serves chiefly to rule out other disease, but Bockus<sup>2</sup> states that the finding of prediverticulitis ser-



rations is tantamount to a diagnosis of colonic neurosis.

Cold hands, hypotension, dry skin, hyperhidrosis, bradycardia, erythema and other findings suggesting a hyper-vagotonia of diencephalic origin are common, and hypermotility of the upper gastrointestinal tract is frequently encountered, leading some to think that this hypermotility causes the colonic symptoms by overwhelming a normal colon with material.

It has not been possible to identify a typical emotional pattern in patients with colonic neurosis, but my own seem to be anxious, apprehensive and constantly tense. As their symptoms improve their psychic elements also improve, but even in remission the inadequate personality pattern shows through. Which came first, the owl or the egg?

For all the above reasons the concept of colonic neurosis must be extremely broad and treatment must be geared to the concept that the disease is due to a correlated dysfunction of the whole autonomic system and the digestive tract.

The diagnosis is again made by exclusion through an exhaustive survey of all causes of colonic dysfunction in the face of symptoms precipitated or aggravated by psychic stress. The differential diagnoses are too numerous to cover in this survey.

General management must include psychic assurance that there is neither cancer nor need of bowel surgery and by a thorough explanation of the condition to the patient, stressing the factors which commonly precipitate attacks. Relaxation by adequate sleep at night and stated rest periods during the day are important. A change in environment often helps provided the patient will accept it and will learn to play. Hospitalization may be necessary in severe attacks. One must never forget the close patient-physician relationship that must exist to give the patient a chance to ventilate his feelings and problems, nor forget the dependency of the patient on a physician who must be positive as well as sympathetic.

Treatment of the individual patient must include a food history with elimination of foods he knows he can not tolerate, as well as a diet low in roughage, condiments, fats and frequently allergenic foods such as sweet milk,

chocolate, coffee and very hot or very cold foods. I do not often use pureed foods or standard bland diets and find that celery and lettuce are well tolerated by most patients. Multiple vitamins, especially B-complex and C seem to be essential to the patient's welfare.

Medicinal aids include sedation with phenobarbital, 15 mg. four times daily, anticholinergics, either belladonna or the synthetics, should be pushed to tolerance, one or two grams of calcium lactate or gluconate three times a day. The hydrophillic colloids sometimes are of benefit, often are not. I have been using a dessicated algae and wetting agent product because it swells only in alkaline media and seems to avoid the epigastric fullness often complained of with other hydrophillics. The aerosols alone have not worked in my hands and at times seemed to irritate the rectum. Plain water enemas give my patients relief when constipation is marked or discomfort persistent, but many authorities disagree with this. I have recently tried Oxaine (oxethazaine) as an adjuvant in a few patients because of its slowing motility of the small gut. I have also used Mylicon (methylpolysiloxane, a silicone), a lowerer of surface tension, a few times for relief of disabling gaseous distension. Results with each have been encouraging to further trials.

The treatment of severe attacks includes all the general measures and some of the following: hot packs to the abdomen, warm plain-water enemas, calcium gluconate 1 gram intravenously, atropine sulfate .006 mg. (1/100 gr.) and phenobarbital sodium 120 to 250 mg. (2 to 5 grains) parenterally, octin (methylesoctenylamine) 100 mg. parenterally and relaxants, especially those with antihistaminic action which can be given parenterally, such as Phenergan. Narcotics should be avoided if possible, but papaverine 10 to 65 mg. (1/6 to 1 grain) has been recommended as the best narcotic when necessary. Hospitalization may at times be necessary both for care and for change of environment.

The prognosis of purely psychic attacks is good for remission, but relapse is the rule. Those of endocrine or allergic origins should be amenable to permanent relief or even cure.



Finally, let me quote Bockus<sup>2</sup> again, "Those who approach the problem of colonic neurosis with a sense of security and smugness, employing only routine, stereotyped methods, are doomed to frequent failures."

#### Summary

Functional constipation is that not attributable to an organic lesion or a non-neurogenic constitutional disorder.

The causes of simple functional constipation are: inadequate food intake, lack of normal conductive drive, long colon, general debility of illness or old age, chronic laxative abuse, voluntary constipation and dyschesia.

The cause of colonic neurosis is probably a generalized autonomic derangement.

The diagnosis of simple constipation lies in the history, physical examination and ruling out all other causes.

The treatment of simple constipation rests on elimination of evident factors, hydrophillic colloids, training and a diet replete with fruits, roughage and fluids. Standard cod liver oil, Dulcolax and plain-water enemas may be necessary.

The diagnosis of colonic neurosis rests on a history of symptoms initiated by or aggravated by psychic trauma, anxiety, tension, fatigue,

chilling, laxatives, foods, endocrine factors, allergic factors or abdominal pain. Also on the physical findings, x-ray examinations, sigmoidoscopic finding of spasm or goat pellets and by the elimination of all other causes.

The long-term treatment of colonic neurosis consists of: explanation of the disease to the patient, encouragement that no cancer is present and no operation needed, psychic ventilation and direction, bland diet, sedatives, anticholinergics, rest, and at times hydrophillic colloids, calcium or change of environment.

The acute attack of colonic neurosis demands meeting the needs of the moment, forcing anticholinergics and sedatives (parenterally if necessary), hot packs to the abdomen, intravenous calcium and possibly hospitalization.

Finally, patients with functional constipation should be under the care of a physician willing to give them the time, effort and understanding essential to adequate and successful diagnosis and treatment.

#### REFERENCES

1. Jordan, Sara M.: Personal conversations with the author.
2. Bockus, H. L.: *Gastroenterology*. Philadelphia, W. B. Saunders Co., 1944, vol. 2, p. 491, and p. 499.

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*Management of chronic eczematoid dermatitis of the hands. A treatment program with iodochlorhydroxyquin-hydrocortisone Cream* by Kathleen A. Riley, M. D. (Charleston) *Internat. Rec. Med.* 173: 300, May 1960.

Iodochlorhydroxyquin-hydrocortisone was found to be an esthetically acceptable preparation with a high degree of efficiency, effective in the treatment of chronic eczematoid dermatitis of the hands. However, results showed the necessity for long continued intensive therapy in a condition as persistent and subject to relapse as chronic eczematoid dermatitis of the hands. Of 44 patients used in this study, 95.5 percent showed improvement within the first two weeks. However, after 24 weeks, only 65.9 percent showed completely clear skin. In the entire group 20.5 percent reported occasional flare-ups even after this period of time. This all emphasized the importance of continued long-term therapy.

*Enzymatic peritonitis due to pancreatic trauma.* J. D. Ashmore, M. D., J. R. Thomason, M. D., W. H. Amspacher, M. D. and G. M. Grimbail, M. D. (Greenville). *South. M. J.* 53:1423-1425, Nov. 1960.

Intraperitoneal accumulation of pancreatic enzymes may occur following upper abdominal surgical procedures or injury, either of a blunt or penetrating nature. Four cases in which this occurred were analyzed and their clinical response noted. Two of the patients had undergone gastric resections for benign ulcers, one had suffered a penetrating gunshot wound of the abdomen and one had suffered blunt trauma. Clinical improvement occurred in three of the patients in which the peritoneal cavity was rid of the enzymes by drainage. One recovered without drainage although the postoperative gastrectomy course was prolonged and stormy. This condition is to be differentiated from parenchymal pancreatic inflammation since the etiology and management differs greatly.

# CHEMICALS MOST EFFECTIVE IN MALIGNANT BLOOD DISEASES

JOHN R. SAMPEY, Ph. D.

*Furman University,*

*Greenville, South Carolina*

Current reviews on the chemotherapy of malignant blood diseases<sup>1-6</sup> invite some interesting tabulations on the most frequently employed agents, and on those showing the highest remission rates. Tabulations on the three most used chemicals in the management of the six blood diseases of acute leukemia, Hodgkin's disease, chronic granulocytic leukemia, chronic lymphocytic leukemia, polycythemia, and lymphosarcoma total the impressive figure of 23,033 patients undergoing the therapy. The term, "chronic granulocytic leukemia", embraces the term, "chronic myelocytic leukemia", in accordance with the recommendations of the Committee on Classification of Nomenclature of Blood Diseases.<sup>6</sup> Table I gives the number of patients treated with the three most used chemicals, and the responses tabulated from the original literature.

Cytotoxic drugs are seen to dominate the management of malignant blood diseases, for 13 of the possible 18 places are filled with these chemicals. Nitrogen mustards lead the cytotoxic drugs with 2 first places, 1 second and 1 third place. Triethylene melamine, (TEM,) is the second most used drug with 3 second places and 1 third place. Radioactive phosphorus, P<sup>32</sup>, holds 2 first places and 1 second. Myleran rates 1 first place and urethan 1 third place to complete the picture with cytotoxic drugs. Adrenal cortical hormones rank second to cytotoxic agents with 1 second place and 2 third places. And antimetabolites account for the remaining two places, with folic acid antagonists, (FAA,) being the most used chemical in acute leukemia, and 6-mercaptopurine, (6-MP,) the third most used in the same disease.

Antimetabolites not only dominate the therapy of acute leukemia, but cytotoxic drugs are conspicuous by their absence in this type of blood disease, for hormones rank second in acute leukemia. Hormones rank third in the clinical trials of both Hodgkin's disease and lymphosarcoma, but the rest of the therapy of malignant blood diseases pictured in Table I is taken over by cytotoxic chemicals. Chronic lymphocytic leukemia and polycythemia show remarkable similarity in their response to cytotoxic drugs with P<sup>32</sup>, N-mustards, and TEM being the agents of choice in each. TEM and N-mustards also rank among the most used agents in the management of Hodgkin's disease and lymphosarcoma.

One of the most striking features of the data in Table I is the little correlation between the most frequently employed chemicals and the order of response as seen from clinical and hematologic remissions. In fact in one half of the six diseases tabulated the order of response is just the reverse of the frequency of use, for in acute leukemia, Hodgkin's disease, and polycythemia the drug giving the highest remission rate is the one used least frequently, while the least used chemical shows the best response. Only in the therapy of chronic granulocytic leukemia does the order of decreasing frequency of trial correspond with the order of decreasing remission rates.

This lack of correlation between the frequency of clinical trial of the chemicals and the response to the same becomes even more striking when reference is made to the more complete tables of data in the original reviews of all six blood diseases.<sup>1-6</sup> For example, in chronic granulocytic leukemia, colchicines show a remission rate of 94%, and 6-MP one of 93% and yet neither appears among the most frequently employed chemicals of column 3 of Table I below; hormones give a remission rate of 85% in chronic

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*Acknowledgment.* The National Library of Medicine and the libraries of Furman University and Greenville General Hospital made available the original literature.

TABLE I  
Chemicals Most Frequently Used to Control Malignant Blood Diseases

Acute Leukemia		Hodgkin's Disease		Chronic Granulocytic Leukemia		Chronic Lymphocytic Leukemia		Polycythemia		Lymphosarcoma	
FAA		N-mustard		Myleran		P-32		P-32		N-mustard	
Cases	Rems.	Cases	Rems.	Cases	Rems.	Cases	Rems.	Cases	Rems.	Cases	Rems.
3114	50%	4246	63%	1265	84%	896	59%	3662	76%	569	66%
Hormones		TEM		P-32		N-mustard		TEM		TEM	
Cases	Rems.	Cases	Rems.	Cases	Rems.	Cases	Rems.	Cases	Rems.	Cases	Rems.
2269	59%	925	70%	1071	77%	762	77%	192	79%	235	48%
6-MP		Hormones		Urethan		TEM		N-mustard		Hormones	
Cases	Rems.	Cases	Rems.	Cases	Rems.	Cases	Rems.	Cases	Rems.	Cases	Rems.
2027	63%	312	80%	620	72%	704	71%	87	92%	77	75%
7410		5483		2956		2362		3941		881	

lymphocytic leukemia, and urethan of 77%, yet neither is in column 4 of Table I; FAA rates 93% remissions in polycythemia, but is absent from column 5; and finally, colchicines with 78% remissions in Hodgkin's disease, and myleran with 72% are not in column 2 of Table I.

This lack of correlation between remission rates and the frequency of use of a drug point up the urgent need for more quantitative

methods of evaluating the clinical and hematologic response of a given chemotherapeutic agent in a given type of malignant blood disease. The availability of the drug, the scientific training and experience of the investigator, and his geographical location are other factors in the problem. A large proportion of the clinical reports reviewed in this paper originated in medical centers outside the continental limits of the United States.<sup>7</sup>

#### REFERENCES

1. Sampey, J. R. and Southern, J. A.: Southeastern Regional Meeting, A.C.S., University of Florida, December 1958.
2. Sampey, J. R.: Management of lymphosarcoma through chemotherapy. *Am. J. Pharm.* 131: 188, 1959.
3. Sampey, J. R.: A decade of chemotherapeutic management of Hodgkin's disease. *Am. J. Pharm.* 132: 27, 1960.
4. Sampey, J. R.: A decade of management of polycythemia through chemotherapy. *Am. J. Pharm.* 132, 338, 1960.
5. Sampey, J. R.: A decade of chemotherapeutic management of acute leukemia. *Internat. Rec. Med.* 173: 312-26 (1960).
6. Sampey, J. R.: A decade of chemotherapeutic management of chronic granulocytic and chronic lymphocytic leukemia. *Am. J. Pharm.* 132: 145-50 (1960).
7. Sampey, J. R.: The challenge of foreign medical journals. *J. M. Educ.* 34: 1120, 1959.
8. Committee for Clarification of Nomenclature of Cells and Diseases of the Blood and Blood-Forming Organs: The terms and definitions for the cells of the leukocytic, thrombocytic and erythrocytic series. *Blood* 8: 89, 1949.



# A FOSTER CARE PROGRAM

UNDER THE CONTROL AND SUPERVISION OF THE  
DEPARTMENT OF PEDIATRICS  
MEDICAL COLLEGE OF SOUTH CAROLINA

JOHN R. PAUL, JR., M. D.

JEAN CRAIG, M. S. W.

*Department of Pediatrics, Medical College of South  
Carolina, Charleston, South Carolina*

Members of the Pediatric Department of the Medical College of South Carolina have long recognized the need for a coordinated medical care and foster care program to serve children with chronic and complicated disabilities who are referred to this center. We have not been satisfied with certain inadequate and makeshift arrangements which have developed and been used in our center. We decided to develop a new program which would be available to local patients as well as patients from distant communities of the state. This need for improved pediatric planning for children with handicaps and medical problems is pointed up in several recent articles.<sup>1-9</sup> Approaches to this problem have been documented in several articles including a recent foster care research program conducted by the Child Welfare League of America, Inc.<sup>10</sup> After several months of planning and with the help and encouragement of the Charleston Chapter of The National Foundation, in February, 1960, the department placed the first child in a medical foster home under its supervision and care.

## *Total Needs*

Many children referred to the Medical Center or attending the clinic on special arrangement with Charleston County have complicated medical and social problems which require relatively long-term and coordinated treatment involving several medical specialties. We feel that the pediatrician should be responsible for the initial work-up and supervision of such children. He assembles information concerning the child's physical, emotional, and mental needs, and initiates planning for evaluation and treatment with such specialties as physical medicine, orthopedics, psychology,

child psychiatry, speech therapy, surgery and medical specialties as indicated. Immediate and long-term planning is effected with the help of the Pediatric Department's social worker for relief of handicaps and chronic disease. Consideration of ultimate needs, at times including adoption or custodial care out of the natural home, is occasionally initiated at the outset.

Many health organizations are interested in providing better care for children who come under their particular program of service, and a number of families who fall within the middle class economic group as well as strictly indigent families need help from one or more of these in meeting the special needs of their children. Relationships with, and knowledge of these is vital to helping such cases. The Pediatric Department relies heavily on its social service worker to develop and maintain these relationships.

As an alternate to prolonged hospitalization or return of the patient to his own home where optimum care may not be available, we desired to offer an environment to meet the emotional, spiritual and social needs of the child by providing an opportunity to participate in family life while his health needs are being met within the medical center. A parent substitute (and a family and home) can prevent serious emotional problems resulting from illness, and actually increase the speed and extent of recovery and rehabilitation. "Hospitalitis", a well known syndrome accompanying prolonged ward care of chronic cases, can be avoided.

Placements under this program are made primarily because of health and handicapping conditions. Children most in need of this type of program are those with poliomyelitis, cere-

bral palsy, and plastic surgical, and orthopedic conditions. Patients having neuro-psychiatric and cardiac problems, epilepsy, mental retardation and behavior and emotional disturbances may also be candidates. Failure to plan for and meet the *total* needs of children who are separated from their own homes because of health problems has at times resulted in a series of poorly integrated hospital admissions, or placements in independent and unsupervised foster homes and convalescent group homes, and in placement with inadequate relatives. These frequent moves which are not made in the child's interest, but usually for the sake of expediency, result in a lessening of his chances for normal emotional development and enthusiastic participation by the child himself in his program of therapy and of optimum and integrated long-range planning for correction of defects.

#### *Homefinding*

Inability to locate suitable foster homes has long been presented as an obstacle in planning for children with special medical and handicapping problems. This is a problem which we recognized. We felt that an adequate compensation plan was essential. By approaching interested and responsible civic groups and key people in the community, as well as making contacts with likely prospective boarding parents, we were encouraged to find that high type, mature and competent people are available to become a part of the team and to take direct responsibility for the child's daily care. We found that the challenge of meeting the standards set forth by the department and becoming a vital part of a Medical Center's program for children is eagerly accepted by desirable potential foster mothers. These foster mothers were selected for their warmth and ability to give emotionally, for their appreciation of how children react to illness, and their past experience with child care agencies or background of nursing training. The effect of having a child with medical problems in the home with their own normal children was discussed and considered thoroughly. This has not been found to be a serious obstacle. Positive comments have been received from boarding parents concerning the acceptance of the child by the entire family group. Indeed, this

becomes a constructive and beneficial experience for the normal children in these homes. The medical foster mothers help the patients adjust to the problems of being separated from their own families and encourage them to follow the program outlined by the physician. Frequently children need help in limiting their activities and in following preventive programs. Foster mothers help them day-by-day in their struggle to learn to live with handicapping conditions and to become self-sufficient despite the handicap.

#### *Procedures and Responsibilities*

Before placement, a complete study of the child's situation and the problems of his family constellation is made. During this process, the parents learn to trust the physician and social worker and develop confidence that the Pediatric Department will select foster parents who will meet the needs of their child, and confidence that this program will help meet the child's total needs. In accepting supervision of the child, the pediatric department assumes responsibility for meeting the educational, recreational, religious, social, and emotional needs of the child as well as for providing continuity of medical care during the acute and convalescent stages of illness.

The Chief of the Department of Pediatrics is responsible for the over-all administration, supervision and direction of the program. A resident pediatrician is available at all times for the immediate medical supervision of the patient in the home and on clinic visits. The resident takes responsibility for general health measures, immunizations and needed medical examinations, and works closely with the attending physician and under his supervision. The attending physician provides continuity of medical care and a continuous relationship with the patient as residents rotate to other services. The caseworker provides a continuing relationship with the patient and helps him with the problems inherent in placement, illness, and handicaps. The caseworker also is the link between the child and his own parents and she helps them to use the program constructively in their future planning for their child.

The ability of the child's own parents to use the program in a positive way is increased as

they are able to understand the child's problems better and relate to the caseworker. By this means the families work through their most acute problems, and learn to participate more positively in the experience in order to help their children with adjustments. They are encouraged to visit their child on a planned basis and maintain family ties.

The relationship with the foster parent and the social worker begins at the time of the home investigation and it continues as pre-placement plans for the child are discussed and as the foster parents are helped to understand and meet the child's needs and participate in the department's program.

"Medical" foster homes are selected in a location which is accessible to the hospital and where the services which the particular child needs can be met. Visits to the home are made by the social worker depending on the needs of the individual children or when the foster parents wish to discuss special problems. Interviews are held at the hospital at regular intervals. Patients are brought to the hospital clinics frequently — sometimes daily — for physical therapy, occupational therapy, speech therapy, or other treatment.

#### *Conclusions and Implications for Future Planning*

Our experience with this program (although it has been limited to placement of only three children in its first year) has convinced us that it is a basic service which is essential

in our plans to develop and expand a comprehensive pediatric program which will provide children with diagnosis, evaluation, treatment and counselling for rehabilitation.

We believe that the success that this program has enjoyed has been due to the philosophy of meeting the total needs of the child by a teamwork approach with pediatrician, social worker, foster mother, nurse, physical and occupational therapists, and other consultants and specialists each working toward a common goal — the physical, mental, educational and social well being of the child.

We hope to extend this service to new categories of patients which we are now unable to place in homes because the needed financial support for their care has not yet been worked out.

This program has already been of value as a teaching program in this center. Pediatric concepts and methods are best taught when combined with practical experience and observations. We anticipate that the growth of this program will contribute significantly to the education of medical students, interns, residents, nurses and other students and trainees at the medical center. A longitudinal study of patients admitted to this program will provide research material of significance to future program planning in methods of care of children with chronic disabilities who do not have unlimited available financial or other resources.

#### REFERENCES

1. Bissel, E.: Foster homes in medical-care programs for children. *The Child*. 14:114, 1950.
2. Bowlby, J.: Maternal care and mental health. W.H.O. Monograph series, No. 2, 1951.
3. Fakkema, L.: Child boarders in the hospital. *Nursing World*. 129:14, May 1955.
4. Glaser, K., and Eisenberg, L.: Maternal deprivation. *Pediatrics*, 18:626, 1956.
5. Goldfarb, W.: Effects of early institutional care on adolescent personality: Rorschach data. *Am. J. Orthopsychiat.* 14:441, 1944.
6. Littner, N.: Primary needs of young children. *Child Welfare League of America, Inc.*, 1959.
7. Littner, N.: Some Traumatic Effects of Separation and Placement. *Child Welfare League of America, Inc.*, Oct. 1956.
8. Ribble, M. A.: *The Rights of Infants: Early Psychological Needs and Their Satisfaction*. New York, Columbia Univ. Press, 1943.
9. *Child Welfare League of America Standards for Foster Family Care Service*. *Child Welfare League of America, Inc.*, 1959.
10. Preliminary Report To The Advisory Committee Of The Foster Care Project, Charleston County: *Research in Foster Care*, *Child Welfare League of America, Inc.*, March, 1959.



# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH

#### Subendocardial Ischemia

DALE GROOM, M. D.  
Department of Medicine

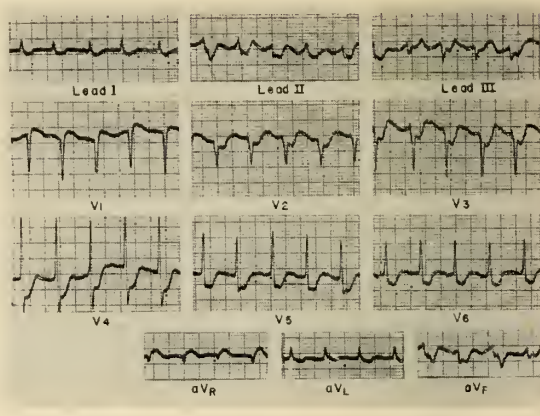
**CASE RECORD**—This electrocardiogram was made on a 90 year old lady with bronchopneumonia. Contributing to her dyspnea was congestive failure which apparently had been precipitated by a persistent tachycardia of 180. A tracing the previous day had shown it to be a paroxysmal atrial tachycardia and all the usual measures, including carotid sinus stimulation, intravenous digitalization and administration of potassium had been ineffective in aborting the attack. On the second hospital day both her tachycardia and orthopnea were improved but she died suddenly, presumably from cardiac arrest. A review of her extensive medical records of past years uncovered no mention of an arrhythmia.

At autopsy the heart appeared grossly normal except for scattered petechiae over the papillary muscles of the mitral valve and a large atheromatous plaque on its aortic cusp. Small calcified plaques without appreciable reduction of lumen were found in a short segment of the right main coronary artery but otherwise the coronary vessels were remarkably free of atherosclerosis. There was no gross evidence of old or recent infarction.

**Electrocardiogram**—Several abnormalities are displayed in this tracing. Amplitude of the QRS complexes is low in all the limb leads, as it commonly is in elderly subjects. The artifacts present in leads 2, 3, and AV-F render them technically unsatisfactory and are probably due to a faulty electrode connection on the left leg which is common to those leads. Although the rhythm is not entirely regular (and numerous ventricular ectopic beats were seen in long strips of the record) the rate holds fairly consistently around 130.

If P waves are present they are obscured by the other complexes so it cannot be determined definitely whether this is a paroxysmal atrial tachycardia which slowed down from the more rapid rate of the previous day or, more likely, a nodal tachycardia at its characteristic rate. The rhythm is therefore classified as a supraventricular tachycardia with frequent ventricular ectopic beats.

Marked depression of the S-T segments (about double that observed in the previous electrocardiogram) is seen in all precordial leads except V-1, which most closely resembles AVR. In those there is re-



ciprocal S-T elevation. R waves are completely absent in V-2 and of small proportion in V-3, suggestive of possible earlier damage to the anterior wall.

**Discussion**—Regardless of controversies about the mechanism of S-T segment displacement, a good general rule is that the segments appear elevated above the baseline in leads which face the injured area of myocardium whereas they appear depressed when normal muscle tissue lies between the electrode and the area of injury. Thus S-T depression in the precordial leads signifies injury to the opposite (posterior) wall or else to the subendocardial layers of the anterior wall. And a subepicardial or mural lesion of the anterior wall gives rise to elevation of the segments in precordial leads. Since at the AVR and often the V-1 positions the electrode effectively looks down into the cavities of the heart, those leads characteristically show reciprocal elevation of the S-T in subendocardial ischemia. This tracing is an excellent example.

Anatomically the subendocardial layers of muscle lie at the tail end of the coronary arterial tree which of course ramifies through the myocardium from the outside in. Any narrowing of one of these vessels along the way might be expected to manifest the greatest amount of ischemia at its most distal area of distribution. Furthermore, those layers are the most intimately concerned in conduction. The Master and other such tests which impose stress on the heart are based upon the displacement of S-T segments by inducing a relative ischemia which almost always is subendocardial in location. Tracings made during attacks of angina pectoris commonly show the same electrical changes. Likewise mechanical stress to the innermost layers of muscle by increased intraventricular pressure ("ventricular strain") may depress the S-T segments. From the pattern point of view it should be noted that segments which come off at more or less of a right

angle to the final deflection of the QRS are generally far more indicative of injury than those which appear to "sag" as with digitalis effect or to curve upward or downward into the T wave as with early repolarization.

Sustained tachycardias above 130 or so frequently result in S-T abnormalities though not ordinarily of this degree. Whether the mechanism is one of a decrease in coronary circulation by the consequent reduction in time for coronary filling in diastole, or is a function of the increased work load on the heart at the less efficient rapid rate, or is due to retention of metabolites or simply what has been called "myocardial fatigue" is not known. At any rate, the S-T displacements often persist for several hours or even days

following a prolonged tachycardia and may become very prominent if congestive failure ensues or if there is significant pre-existing coronary insufficiency as in instances of angina precipitated by paroxysmal tachycardia. Certainly in such cases, and in all elderly patients, it is imperative to treat a persistently rapid ventricular rate whether it be due to a paroxysmal supraventricular tachycardia, to atrial fibrillation or other causes. Often the differentiation between ischemia and actual infarction of the subendocardial myocardium is uncertain, and quite likely some degree of necrosis does occur in many of these cases which at autopsy may show scattered small fibrous scars beneath the endocardium.

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*Use of exchange transfusion in salicylate intoxication*—S. L. Leikin and G. C. Emmanouilides. J. Pediat—57 (Nov.) 1960.

Seven children between the ages of 1 month and 3 years were hospitalized because of intoxication by aspirin. The ingestion was accidental in 6 patients and iatrogenic in 1. The amount ingested varied from 3.2 to 12.8 gm. Hyperpnea was present in all patients; on admission, 2 were in a coma and the others had varying degrees of irritability and lethargy. The levels of blood salicylate ranged from 78 to 160 mg. per 100 cc. The patients were treated by exchange transfusion which was preceded by gastric lavage in 4 and by the administration of fluids with alkalinizing agents in 4. One 28-month-old child experienced shocklike reaction which was overcome with intramuscular injection of diphenhydramine (Benadryl) and replacement of the unit of blood being used. Six patients recovered; 1 died 10 hours after having been admitted to the hospital in a coma. Transfusion of from 2 to 4 volumes of blood produced a mean 47% drop in the blood level of salicylate; the total amount of transfusion was determined by the clinical improvement in each case. At least twice the patient's estimated blood volume is necessary for exchange transfusion in salicylism.

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*Tinea capitis survey in Charleston, S. C.*—A. A. Terreni. Arch Derm—83 (Jan.) 1961.

A total of 2,717 white children and 3,837 Negro children were examined in their racially separated schools for tinea capitis. Seven cases were found in the white children, and 293 Negro children had the disease. In the 300 cases, 95% showed fluorescence under Wood's Light, 95% gave positive microscopic examinations in KOH, and 92% were successfully cultured. The predominant organism was *Microsporum*

*audouinii*. Of the 300 cases only 113 showed a definite clinical manifestations.

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*An evaluation of cervical conization.* L. L. Hester, Jr., M. D. and Robert A. Read, M. D. (Charleston). Am. J. Obst. & Gynec. 80:715, Oct. 1960.

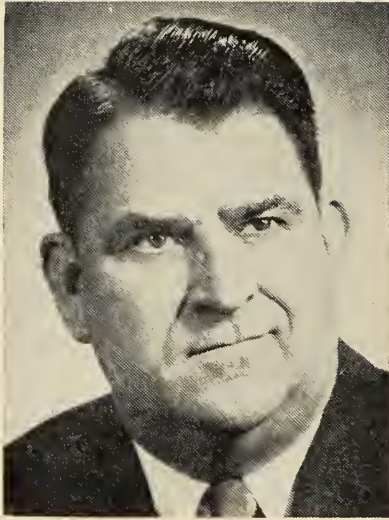
Cervical conization has been used as a method of therapy for many years, but recently has become a diagnostic tool. There has been a decrease in emphasis on both cauterization and conization of benign, asymptomatic cervical lesions because the complications in many cases were worse than the benign process. Thus, the purpose of this paper was an evaluation of cervical conization both as a diagnostic and therapeutic procedure.

The indications for cervical conization are:

1. Persistent positive cervical cytology.
2. Punch cervical biopsies that reveal *carcinoma in situ* or atypical cervical epithelium.
3. Punch cervical biopsies that reveal possible invasive carcinoma, but scarcity of material and lack of underlying stroma makes interpretation hazardous.
4. Intractable cervicitis that has not responded to conservative management.

The complications of cervical conization are: (1) Uterine hemorrhage, early or late; (2) Uterine perforation; (3) Entrance into peritoneal cavity through the cervix; (4) Cervical stenosis with hematometra or dysmenorrhea or both. (5) Pelvic infection.

The value of cervical conization as a reliable and accurate diagnostic procedure is stressed. The high percentage, 47 per cent, of residual, abnormal, cervical epithelium in the uterus following conization, re-emphasizes total hysterectomy as the treatment of choice in *carcinoma in situ*.



## President's Page

This is the last month of my term. When it is finished I will have traveled about 10,000 miles on Association business, most of which was in South Carolina. Getting to meet and talk to the doctors in each county of the state has been a very happy experience. Everywhere I have gone there has been a most cordial and interested reception, and problems and ideas have been freely discussed.

These visits with you have certainly been a great help to me; and I believe that the County Societies may have received a boost in their morale and a better understanding of their responsibility as the fundamental unit of our State Association.

I wish to thank the many physicians over the state for their wholehearted cooperation. The officers of the various county societies have been very helpful in arranging meetings and stimulating the fine attendance under sometimes adverse circumstances.

The Councilors of each District have gone with me to many gatherings of the Counties in their Districts.

There has been close liaison with the Chairman of Council, the A. M. A. Delegates, the Secretary and the President Elect.

Dr. B. J. Workman deserves special recognition for his work as Vice President. We promised to put him to work, and did. He responded like an eager fire horse, waiting for the bell. To say more would lay one's self liable as the cause of his bleeding peptic ulcer. At any rate, I do not think we were the only cause.

Mr. M. L. Meadors has been of inestimable help in many things. He has always been ready and willing to aid me in any conceivable way. It was my good fortune to have Mr. Meadors with me at all of our county meetings, and I am sure that he enjoyed these experiences as I did, and that the doctors appreciated his interest in coming. To Dr. Wyatt, our President-Elect, I commend Mr. Meadors as an excellent chauffeur.

To our long suffering Editor, I apologize for always having to be reminded to get the President's Page in on time, and would express my appreciation to him and to Miss Gresham, of Provence-Jarrard, for the nice appearance of the published Journal.

Your President has learned a great deal from these informal conferences, and the pleasure of renewing acquaintances with old friends and making new ones can't be described in mere words. Sufficient to say to those who follow me in office, if they profit a third as much as I have, this extra effort is well worth while.

JOSEPH P. CAIN, JR., M. D.



# Editorials

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## **The Annual Meeting — 1961**

Scheduled for an earlier date than usual, the Annual Meeting of the Association will be held in Charleston April 25, 26, and 27, and will offer the usual combination of business session and scientific program. This year the latter is being conducted on a new method and will be provided entirely, so far as the main scientific presentations go, by the Faculty of the Medical School of the University of North Carolina. Contributions from our own members will make up the balance of the program, which appears in this issue of *The Journal*. Charleston offers its usual hospitality and attraction to the members of the Association and their wives. Since the South Carolina Medical Association was organized in the old city, it is appropriate that meetings should be held periodically at the site of the earliest sustained effort for the development of organized medicine in the state. The Charleston profession offers a hearty welcome to the members from the rest of the state.

A large attendance may be expected, and the wise member will make his reservations as soon as possible.

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## **Compulsory Inoculation**

At this writing the papers report that a bill has been introduced in the House of Representatives for South Carolina and that a public hearing is to be held within a few days on the question of compulsory immunization against poliomyelitis.

It will be recalled that the Association at its last meeting in 1960 approved compulsory immunization. There was some division of opinion about the matter, based largely on the political question as to whether compulsion was proper or not. Proponents of the action pointed out that voluntary immunization had been rather a fiasco, and that people had not taken advantage of the vaccine which could be obtained without charge and had not been enthusiastic about the necessity of protection.



It was pointed out that this apathetic approach was possibly due to the fact that South Carolina has had relatively little poliomyelitis in recent years and that the public had gotten to the point where it felt that the danger was slight and the effort to secure immunization was too great. Die-hard defenders of the individual rights of man insisted that those who did not wish to be saved should not be forced to seek protection, and disregarded the rather practical policy which has been pursued in other matters relating to public health that when the public refuses to do what is best for it by all standards of the best informed and experienced people, for the protection of the less resistant element of the public, the more resistant should undergo some legal coercion.

The bill as introduced contemplates that most immunizations will be handled through the regular channel of the private physician, but provision is made for free immunization for those who are unable to pay the ordinary modest fee.

By this time the bill will perhaps be lost or passed. If it was lost, it seems a pity; if it was passed, it seems to provide for a forward step toward better health for South Carolina.

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### **Mental Health Centers**

As this is written, it appears that the State Senate has approved a plan for developing ten mental health centers over the state. Local funds to be provided would be matched by the state money, to make a total cost of somewhere in the neighborhood of \$250,000. Those mental health centers now in operation are generally crowded and patients must wait for long periods before they can be seen. This increase in the number of available centers should relieve this pressure and do a great deal of good in providing sources of advice to the mentally disturbed adult and the problem child. Removal of the stumbling block of lack of personnel to staff these centers is a considerable difficulty, and no solution can be offered at the moment. Competent people in the field of mental health are scarce, and the load which they carry is small in point of numbers, since of necessity the handling of the kind of patient received in these centers is prolonged and difficult.

This is a very desirable step forward, and should be encouraged heartily by the profession.

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### **The Medical Examiner**

The West Virginia Medical Association is pushing hard to have legislation passed establishing a better system than the one now in use in the matter of the coroner. Advocates of the bill point out that it is similar to those which have been passed in the neighboring states of Maryland and Virginia and that in those areas the laws work well.

The coroner as we know him now, was once a collector of taxes for the Crown, and gradually came to assume other functions such as the registration of unusual and unexpected deaths. There was no provision that the coroner need be qualified in any particular way other than as a good tax collector and no special knowledge of the matters which would apply in the investigation of deaths which were not apparently and clearly due to natural

causes. Obviously confidence in the validity of our vital statistics must be much shaken when it is realized that a very large proportion of the death certificates in many areas are signed by people who have no particular medical knowledge. In a current survey in Charleston County on coronary disease it was discovered that nearly 30% of the certificates of death from this particular disorder were signed by the coroner. Obviously statistical virtue goes out of the window with such a shaky basis.

While the West Virginians realize that the office of coroner is actually outmoded, they are proposing a bill which does not abolish that office, but requires that the cause of death under investigation be established and certified by the State Medical Examiner or his local representative, the Deputy Medical Examiner. Thus the final determination of the cause of death will be in medical hands. At present very few coroners are physicians. For instance in California only 3 of the 58 of the coroners are physicians; in Alabama 3 of the 67; and in Colorado 11 of the 63.

Those who are advocating the bill in West Virginia admit the proposed changes will cost more than does the present system, but they feel assured that the results will be well worth the expenditures.

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### **AMA Dues**

For four years at least, the possibility of increasing annual A. M. A. dues has been discussed in the House of Delegates. In an effort to reduce operating costs all medical journal printing has been discontinued at the home office, 535 N. Dearborn Street. Rather than buy more property, the space utilized by the printing department has been used for other purposes necessitated by expansion of the A. M. A.'s services. Outside objective surveys have been made to streamline and make more efficient the numerous departments in the home office. The recommendations of these surveys have been carried out. The Board of Trustees has cracked down as much as possible on excessive spendings. In addition, the House of Delegates makes further demands on the treasury while at the same time inflation takes its toll.

At present the plan is to increase dues by \$10.00 per year in 1962 and again in 1963. The programs for which this additional money is needed are: (1) Financial assistance to medical students. More and more outstanding students are going into fields other than medicine. The percentage of A students going into medicine has dropped from 40% ten years ago to 16% now. The student A. M. A. has requested repeatedly that the A. M. A. furnish funds to deserving students. Most delegates thought a loan fund at a small rate of interest would be sufficient. By request the President of the Student A. M. A. asked permission to address the House of Delegates. He received permission and in an impassioned impromptu talk told how he had gone into engineering because of the opportunity for education paid for by big companies. He got out at a sacrifice and is graduating or has graduated by now. Very few men leave engineering as he did. He feels that the A. M. A. must put up grants for deserving students if we doctors expect the Federal government to refrain from doing so.

(2) There is an insistent demand for continuing education for practicing physicians. Physicians demand more and more information about new medical concepts as well as the vast complex of new drugs and techniques.

(3) Health advice to the American public. The second most interesting news topic is about health. High blood pressure, heart disease, cancer, arthritis, quackery, diets of all types and descriptions require more and more articles, movies, film strips, and displays.

(4) Medical research. The most important resources of the A. M. A. are its member phy-

sicians including those engaged in medical research. Programs designed to encourage their activities, to support their efforts and to publicize their work to the entire medical profession are worthy of additional financial support.

What is the history of dues in the A. M. A.?

	<i>Annual Dues</i>	<i>Annual Fellowship Dues</i>
1848 through 1852	\$ 3.00	
1853 through	5.00	
1854 through 1865	3.00	
1866 through 1909	5.00	
1910 through 1911	1.00	
1912 through 1920	None	\$ 5.00
1921 through 1949	None	6.00
1950	25.00	6.00
1951	25.00	5.00
1952 to date	25.00	

Fellowship classification started in 1912 and was dropped in 1951.

The operations budget of the A. M. A. in 1899 was \$40,000.00. In 1960 the programs of American medicine will require the expenditure of \$16,500,000.00 only 21% of which will be derived from dues of its physician members.

To maintain a balanced budget, and to carry out the aims of the House of Delegates, an increase in annual dues is necessary. The Board of Trustees feels that members of the A. M. A. should accept a larger responsibility for financing the programs of the A. M. A. If all members willingly accept this responsibility, the A. M. A. will be able to expand its present programs as well as institute new desirable ones such as financial aid to students.







for inflammatory

## YOUR CHOICE OF FIVE TOPICAL FORMS

### **Aristoderm<sup>®</sup>** **Foam** Neomycin— Triamcinolone Acetonide

7.5 cc. and 15 cc.  
push-button dispensers  
Neat, not messy or sticky—  
spreads readily without  
irritation or burning—for  
oozing, crusted, severely  
inflamed and injured skin  
or mucous membranes.

Each cc. contains:  
Aristocort Triamcinolone Acetonide, 1 mg. . . . 0.1%  
Neomycin Sulfate, 5 mg. . . . . 0.5%

**Precautions:** Contraindicated in herpes  
simplex. Sensitivity reactions to  
neomycin occasionally occur.



### **Aristoderm<sup>®</sup>** **Foam 0.1%** Triamcinolone Acetonide

7.5 cc. and 15 cc.  
push-button  
dispensers

**Precautions:**  
Contraindicated  
in herpes simplex



### **Aristocort<sup>®</sup>** **Cream 0.1%** Triamcinolone Acetonide

Tubes of 5 and 15 Gm.

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in herpes simplex,



and allergic skin conditions . . .  
 simple, sparing application — prompt, symptomatic relief —

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topicals

## HIGHLY ACTIVE WHEN DIRECTLY APPLIED TO SKIN LESIONS

A recent study has demonstrated the efficacy of triamcinolone acetonide 0.1 per cent in 222 patients with a variety of allergic and inflammatory dermatoses. The conditions included in the study were contact dermatitis, seborrheic dermatitis, neurodermatitis, atopic dermatitis, and pruritus vulvae.

The anti-inflammatory and antipruritic efficacy of triamcinolone acetonide was shown by the prompt control of itching and resolution of affected areas. Cahn, M. M., and Levy, E. J.: A Comparison of Topical Corticosteroids: Triamcinolone Acetonide, Prednisolone, Fluorometholone, and Hydrocortisone.

*Antibiotic Med. & Clin. Ther.* 6:734 [Dec.] 1959.

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Ointment 0.1% Triamcinolone Acetonide

Tubes of 5 and 15 Gm.



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### Nec-Aristocort®

Eye-Ear Ointment 0.1% Neomycin—Triamcinolone Acetonide

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For inflammatory,  
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Each gram contains:  
 Aristocort Triamcinolone Acetonide — 1 mg  
 Neomycin Sulfate . . . . . 5 mg

**Precautions:** Contraindicated in herpes  
 simplex. Sensitivity reactions  
 to neomycin occasionally occur



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 Pearl River, New York



## PROGRAM

**ANNUAL MEETING, SOUTH CAROLINA MEDICAL ASSOCIATION**

**CHARLESTON, S. C.**

**APRIL 25, 26 AND 27**

**FRANCIS MARION HOTEL**

**GENERAL PROGRAM**

### **TUESDAY, APRIL 25**

- 9:00 a. m. Meeting of Council (Belle Isle Room)
- 2:30 p. m. House of Delegates (Gold Room)
- 5:30 p. m. Reference Committees (Meeting places to be announced.)

### **WEDNESDAY, APRIL 26**

- 9:30 a. m. House of Delegates Resumes (Gold Room)
- 10:00 a. m. Scientific Movies Throughout the Day (Belle Isle Room)
- 12:30 p. m. House of Delegates Adjourns
- 1:00 p. m. Alumni Luncheon (Sky Terrace Room)
- 2:30 p. m. Scientific Session (Gold Room)
- 5:00 p. m. Adjournment
- 9:00 p. m. Alumni Association Entertainment (Sky Terrace Room)

### **THURSDAY, APRIL 27**

- 9:30 a. m. Scientific Session Resumes (Gold Room)
- 10:00 a. m. Scientific Movies Throughout the Day (Belle Isle Room)
- 12:30 p. m. Recess for Lunch
- 2:30 p. m. Scientific Session Resumes  
(Panel discussions in Gold Room and Marion Room)
- 5:00 p. m. Adjournment of Scientific Sessions
- 8:00 p. m. Annual Banquet and Ball for Alumni Association and Guests  
(Sky Terrace and Gold Rooms)



## HOUSE OF DELEGATES

Dr. J. P. Cain, Jr., Presiding

### TUESDAY, APRIL 25

- 2:30 p. m. Call to Order  
Invocation  
Report of Credentials Committee  
Opening Remarks by the President  
Introduction of President-elect  
Announcement of Reference Committees  
Presentation of Resolutions and Recommendations
- 3:15 p. m. Introduction of Officers and Guests of Woman's Auxiliary  
Reports of Officers  
The President  
The Executive Secretary  
The Secretary  
The Treasurer  
The Editor of the Journal  
The Chairman of Council  
The Delegates to the A. M. A.
- 4:30 p. m. (Special Order) The Annual Meeting of the Corporation, The South Carolina Medical Care Plan  
Reports of Committees  
(The reports of the Committees will have been published in the Journal and will not be read before the House. Any supplementary remarks by the Chairman will be heard at this time.)  
Report of State Board of Medical Examiners  
Report of Executive Committee of State Board of Health  
Unfinished Business  
New Business
- 5:30 p. m. Meetings of Reference Committees  
(All members of the Association are invited to appear before the Committees considering matters in which they are interested. Meeting places will be posted and announced.)

### WEDNESDAY, APRIL 26

- 9:30 a. m. Call to Order  
Reports of Reference Committees
- 11:30 a. m. Annual Elections  
Officers:  
President-Elect  
Vice-President  
Secretary  
Treasurer  
Delegate to the A. M. A.: (2-yr. term)  
(The term of Dr. William Weston, Jr., expires December 31, 1961.)  
Alternate Delegate to the A. M. A.: (2-yr. term)  
(The term of Dr. Frank C. Owens expires December 31, 1961.)  
Councilors: (3-yr. terms)  
Second District (The term of Dr. A. F. Burnside expires)  
Fifth District (The term of Dr. John M. Brewer expires)  
Eighth District (The term of Dr. J. H. Gressette expires)  
Members of Mediation Committee: (3-yr. terms)  
Second District (The term of Dr. Weston C. Cook expires)  
Fifth District (The term of Dr. Roderick Macdonald expires)  
Eighth District (The term of Dr. W. R. Tuten, Jr., expires)  
Member of Benevolence Fund Committee (3-yr. term)  
(The term of Dr. Thomas G. Goldsmith expires.)  
Members of the State Board of Medical Examiners: (4-yr terms)  
First Congressional District (The term of Dr. A. R. Johnston expires)  
Third Congressional District (The term of Dr. Wm. P. Turner, Jr. expires)  
Members of Hospital Advisory Council of State Board of Health (4-yr. terms)  
(The term of Dr. J. C. Harris expires.)  
(The term of Dr. T. C. McFall expires.)  
Selection of Place for the 1962 Annual Meeting  
Sine Die Adjournment

RESEARCH TOURS AT THE MEDICAL COLLEGE HOSPITAL  
WILL BE CONDUCTED ON WEDNESDAY MORNING.

(Schedule to be posted at the headquarters hotel.)

## SCIENTIFIC SESSION

### WEDNESDAY AFTERNOON — The Gold Room — April 26, 1961

Presiding: Dr. J. P. Cain, President

- 2:30 to 2:50 p. m. **EARLY MANAGEMENT IN HEAD INJURIES**  
 Dr. Frank F. Espey, Neurosurgeon, Greenville, South Carolina  
 A discussion of the immediate care of acute head injuries, illustrated by lantern slides. Copies of this paper will be available.
- 2:50 to 3:20 p. m. **PEPTIC ULCERATIONS OF THE STOMACH AND DUODENUM**  
 Dr. Ross Z. Pierpont, Chief of Surgery, Maryland General Hospital, Baltimore, Maryland  
 A broad discussion of ulcers of the stomach and duodenum which will include the surgical aspects of the problem.
- 3:20 to 3:40 p. m. **ACUTE CORONARY INSUFFICIENCY**  
 S. C. Heart Association Lecture—in honor of Mr. E. B. Grier, deceased, Greenville, South Carolina  
 Dr. Peter C. Gazes, Assistant Professor of Medicine, Medical College of S. C., Charleston, South Carolina  
 Dr. Gazes will present the clinical and electrocardiographic picture of this syndrome with particular emphasis on the "Master two-step test".
- 3:40 to 4:00 p. m. **NON OPAQUE FOREIGN BODY BRONCHIECTASIS**  
 Dr. Wendell B. Thrower, Assistant Professor Thoracic & Cardiovascular Surgery, Charleston, South Carolina  
 Case reports and discussion of problem cases of pulmonary infection, which are caused by unsuspected foreign bodies which are not visible on routine x-ray examination, but with end result of irreversible bronchiectasis.
- 4:00 to 5:00 p. m. **JAUNDICE — A PANEL DISCUSSION**  
 Dr. C. W. Legerton, Jr., Charleston, South Carolina, Moderator — Gastroenterology  
 Dr. Ross Z. Pierpont, Baltimore, Maryland — Surgery  
 Dr. Harold Pettit, Charleston, South Carolina — Radiology  
 Dr. C. W. Delia, Conway, South Carolina — Clinical Pathology  
 Dr. Hugh H. Dubose, Columbia, South Carolina — Internal Medicine  
 The ever perplexing problem of obstructive versus non-obstructive jaundice. The interpretation of laboratory tests, x-ray findings, and the medical and surgical care of these patients.

### THURSDAY MORNING — The Gold Room — April 27, 1961

Presiding: Dr. J. P. Cain, President

- 9:30 to 10:00 a. m. **BREAST MALIGNANCY — TREATMENT AFTER SURGERY**  
 Dr. James F. Newsome, Assistant Professor of Surgery, University of North Carolina, Chapel Hill, North Carolina  
 Dr. Newsome is director of the tumor clinic and will discuss hormonology of cancer and its growth.
- 10:00 to 10:10 a. m. **DISCUSSION**  
 Dr. John C. Hawk, Jr., Associate Professor of Surgery, Medical College of S. C., Charleston, South Carolina
- 10:10 to 10:40 a. m. **PHYSIOLOGIC CHANGES AT BIRTH**  
 Dr. Herbert S. Harned, Associate Professor of Pediatrics, University of N. C., Chapel Hill, North Carolina  
 Dr. Harned will discuss the immediate changes, chiefly respiratory and circulatory, in the newborn with emphasis on immediate care of the newborn.
- 10:40 to 10:50 a. m. **DISCUSSION**  
 Dr. Walter M. Hart, Florence, South Carolina
- 10:50 to 11:20 a. m. **MANAGEMENT OF ACUTE RENAL INSUFFICIENCY**  
 Dr. William B. Blythe, Instructor in Medicine, University of N. C., Chapel Hill, North Carolina  
 Dr. Blythe will cover renal physiology and disease with emphasis on chemical (drug) poisoning, transfusion, et cetera.
- 11:20 to 11:30 a. m. **DISCUSSION**  
 Dr. Arthur V. Williams, Charleston, South Carolina
- 11:30 to 12:00 p. m. **BLEEDING IN THE LAST TRIMESTER OF PREGNANCY**  
 Dr. A. Stark Wolkoff, Assistant Professor of Obstetrics & Gynecology, University of North Carolina, Chapel Hill, North Carolina  
 Dr. Wolkoff will discuss the placenta as an organ, as well as the clinical significance of bleeding in late pregnancy, plus a discussion of clotting mechanisms.
- 12:00 to 12:10 p. m. **DISCUSSION**  
 Dr. J. Decherd Guess, Greenville, South Carolina
- 12:10 to 12:40 p. m. **TREATMENT OF THE ADVANCED CANCER PATIENT**  
 Dr. Charles A. Bream, Associate Professor of Radiology, University of North Carolina, Chapel Hill, North Carolina  
 A discussion of x-irradiation, isotope therapy, chemotherapy, surgical and neuro-surgical procedures for palliation of the patient with far advanced cancer.
- 12:40 to 12:50 p. m. **DISCUSSION**  
 Dr. J. Harvey Atwill, Jr., Orangeburg, South Carolina

ADJOURN

**THURSDAY AFTERNOON — The Gold Room — April 27, 1961**

Presiding: Dr. R. C. Smith, Chairman, Program Committee

**SECTION A — 2:30 to 3:30 p. m.**

**MEDICINE AND SURGERY**

**THYROID DISEASES — A PANEL DISCUSSION**

Dr. James F. Newsome	Department of Surgery University of North Carolina
Dr. William B. Blythe	Department of Medicine University of North Carolina
Dr. Charles A. Bream	Department of Radiology University of North Carolina
Dr. William H. Prioleau	Department of Surgery Medical College of South Carolina
Moderator — Dr. John F. Buse, Jr.	Department of Medicine Medical College of South Carolina

This panel will discuss the diagnosis and treatment of thyrotoxicosis, solitary nodules of the thyroid, cancer of the thyroid, myxedema, plus the complications of thyroid disease and thyroid surgery.

**SECTION B — The Marion Room — 2:30 to 3:30 p. m.**

Presiding: Dr. J. P. Cain, President

**PEDIATRICS, OBSTETRICS, GYNECOLOGY**

**THE EFFECT OF DRUGS AND ANESTHETIC AGENTS ON MOTHER  
AND CHILD, PRE & POST PARTUM**

Dr. A. Stark Wolkoff	Department of Obstetrics & Gynecology University of North Carolina
Dr. Herbert S. Harned	Department of Pediatrics University of North Carolina
Dr. Laurie Brown	Department of Anesthesiology Roper Hospital, Charleston, S. C.
Moderator — Dr. John R. Paul, Jr.	Department of Pediatrics Medical College of South Carolina

The advantages and disadvantages of drugs, anesthetic agents, parenteral fluids and transfusion needs reemphasis. The place of hypnotherapy in this field is debatable. These points will be discussed.

**SECTION C — The Gold Room — 3:45 to 5:00 p. m.**

Presiding: Dr. R. C. Smith, Chairman, Program Committee

**MEDICINE AND PEDIATRICS**

**THE COLLAGEN DISEASES — A PANEL DISCUSSION**

Dr. Herbert S. Harned	Department of Pediatrics University of North Carolina
Dr. William B. Blythe	Department of Medicine University of North Carolina
Dr. H. R. Pratt-Thomas	Department of Pathology Medical College of South Carolina
Dr. D. Lesene Smith	Spartanburg, South Carolina
Moderator — Dr. Cheves Sioythe	Department of Medicine Medical College of South Carolina

This will include not only a discussion of the so called collagen diseases, such as lupus erythematosus, pan-arthritis, and dermatomyositis, but also the possible relation to rheumatoid arthritis, rheumatic fever and nephritis.

**THURSDAY AFTERNOON — The Marion Room — April 27, 1961**

Presiding: Dr. J. P. Cain, President

**SECTION D — 3:45 to 5:00 p. m.**

**SURGERY, OBSTETRICS, GYNECOLOGY**

**THE PAINFUL FEMALE PELVIS — A PANEL DISCUSSION**

Dr. James F. Newsome	Department of Surgery University of North Carolina
Dr. A. Stark Wolkoff	Department of Obstetrics & Gynecology University of North Carolina
Dr. Edward J. Dennis	Department of Obstetrics & Gynecology Medical College of South Carolina
Dr. Forde A. McIver	Department of Pathology Medical College of South Carolina
Dr. Charles A. Bream	Department of Radiology University of North Carolina
Moderator — Dr. William C. Cantey	Columbia, South Carolina

Dysmenorrhea, endometriosis, displacement of the uterus, benign and malignant tumors, their diagnosis and treatment. Other conditions such as diverticulitis, renal and musculoskeletal causes will be discussed.



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# ANNOUNCEMENTS

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**WEDNESDAY, APRIL 26**

6:00 p. m. to 8:30 p. m. **BOAT TRIP TO FORT SUMTER**

Boat leaves Ft. Sumter dock 6:00 p. m. Singing by the Society for the Preservation of Negro Spirituals. Box Supper. The Alumni Association is your host.

## **PHI RHO SIGMA HOUSE**

The Phi Rho Sigma House, 511 Ocean Blvd., Isle of Palms, will be available to alumni and their families during the entire week of the State Medical Meeting, April 24th-30th, for beach use.

Anyone desiring the house as a lodging should write to:

Maxie McCoy, c/o Alumni Memorial House, Charleston, S. C..

The local chapter is making plans to hold an open house and a cocktail party during the meeting. Plans will be announced by letter.

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## **WOMAN'S AUXILIARY SOUTH CAROLINA MEDICAL ASSOCIATION**

**President: Mrs. George Smith, Columbia, S. C.**

**Recording Secretary: Mrs. George Dawson, Florence, S. C.**

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The Woman's Auxiliary to the South Carolina Medical Association plans to hold its Thirty-sixth Annual Convention on April 25, 26, and 27th at the Francis Marion Hotel in Charleston. One or two changes will be instituted this year in an effort to shorten the meetings. In the past it has been customary to hold two meetings on the last day of the Convention, i.e., House of Delegates and General Meeting; however a motion was made and passed at the Fall Executive Board Meeting that these two meetings be combined. Various changes in the program for this meeting are being worked out and it is hoped that these changes will make the meeting more enjoyable for those attending. All reports will be limited to two minutes and all meetings will be held in the Charleston Harbor Room of the Francis Marion Hotel. All luncheons will also be at the Hotel.

Something new has been added this year for the enjoyment of the ladies and that is the Hospitality room. The Jessamine Room has been designated for

this purpose and it is hoped that all who attend will take advantage of it as a place to lounge, play bridge, read or just chat with friends.

Our guest speaker for the Board Luncheon on Wednesday, April 26th, will be Mrs. Kalford Howard, President of the Woman's Auxiliary to the Southern Medical Association. Mrs. William MacKersie, President of the Woman's Auxiliary to the American Medical Association will be the guest speaker at the Membership Luncheon on Thursday. We are also hoping that Dr. Atmar Smith will be with us at one of these luncheons to bring us a message about the Benevolence Fund.

A great deal of credit goes to Mrs. Peter C. Gazes, our Convention Chairman who has been working long and hard since last July to make this a truly outstanding Convention.

Mrs. George W. Smith, President  
Woman's Auxiliary to the S. C. Medical Assoc.



DR. JOSEPH P. CAIN, JR.  
OF MULLINS  
PRESIDENT FOR 1960-61



DR. B. J. WORKMAN  
OF WOODRUFF  
VICE PRESIDENT FOR 1960-61

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## Committee Reports - 1960 - 1961

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### Committee on Industrial Medicine

The matter of the new fee schedule in Workmen's Compensation cases had been considered by a special committee prior to the last Annual Meeting. It was referred back to that committee in May, 1960, for study with power to act. Members of that committee conferred with representatives of the State Chamber of Commerce, by which some question had been previously raised and agreement on a proposed schedule was reached between the two groups. This action was reported to Council at its mid-year meeting.

One member of the Committee attended the Congress on Industrial Health, sponsored by the American Medical Association, held in October in Charlotte, North Carolina. At this meeting, an attempt was made to form a State Chapter of the Industrial Medical Association or, possibly, a North Carolina-South Carolina Chapter to be affiliated with the National Industrial Medical Association.

The Pee Dee Medical Auxiliary did an outstanding job in promoting accident prevention and worked in

close cooperation with all law enforcement departments. The South Carolina Accident Prevention Conference, held in Columbia in November, 1960, was attended by the Committee.

Mr. B. Dixon Holland, Director of Occupational Health of the American Medical Association, had a long conference with the Chairman of the Committee. He left us a lot of literature and assured us he was ready to help in any way he could with any of our industrial medical problems.

The Industrial Medical Society of South Carolina held its Association meeting, May 18, 1960. All of the members of this special committee are members of this Society and work in close liaison.

The annual meeting of the Industrial Medical Society will be held at the time of the State Medical Association meeting in Charleston, exact time and date to be announced.

G. R. Dawson, Jr., M. D.  
Chairman



**DR. CHARLES N. WYATT  
OF GREENVILLE  
PRESIDENT-ELECT OF THE SOUTH  
CAROLINA MEDICAL ASSOCIATION 1960-61.**

### **Insurance Committee**

The Insurance Committee held two formal meetings and considered several matters of interest to members of the Association. In addition, a considerable amount of preliminary investigation and study was made by the Chairman of the Committee and others, principally with respect to a plan for retirement benefits for members of the Association. At the first of the meetings, in December, the Chairman outlined to the Committee two possibilities. First, an investment plan handled through a bank and second, a group annuity plan through insurance. At this meeting, the members of the Committee heard Mr. William M. Werber of Werber Insurance Agency, brokers of Washington, D. C. Mr. Werber explained that his firm attempted to procure for its clients the type of insurance coverage best designed to meet the program sought. In this instance, he recommended a plan of the Minnesota Mutual Life Insurance Company, which, he said had distinct advantages over similar plans offered by others. Mr. Werber was requested to make his presentation in written form for the study of the members of the Committee and this was subsequently done.

On further consideration of the matter at a subsequent meeting held in Florence in February, it was pointed out that the plan previously suggested represented provisions for retirement income purely on an

individual basis and that some further advantage might be obtained for the members of the Association through a program on a group basis, with or without life insurance as a combined feature. It was, therefore, decided that the Committee would look further into the situation along this line before making any definite recommendations.

There has been also presented to the Committee for its consideration a plan for major hospital expense coverage, along the lines of the "major medical" insurance contracts which have been on the market during the past several years. Actually, this proposal, designed especially for members of the Association, does not provide for payment of physician fees but does include attractive features not included under similar programs of the Southern Medical Association and other specialty groups. Included with this presentation was a proposal for a separate program of disability insurance coverage. The latter was represented not as a substitute for but as an addition to our present program for disability coverage with Educators Mutual Insurance Company. It was not intended to require that subscribers to the major hospital expense plan take the disability contract also but the insurance company representatives would insist that they be permitted to offer the disability program, if they are to write the other. The Committee has taken no action with respect to either of these plans. They were presented by the General Agency of Charleston, which handles the Association's business expense insurance program.

There was referred to the Committee of Council, a suggestion of the Executive Secretary, that the Association provide retirement benefits for members of the staff, not including himself, and consisting of either two or three young ladies. The Committee, after due consideration, approved the idea in principle and the Executive Secretary was requested to obtain information on several such plans by competitive companies and submit these to the Committee for its further consideration and recommendation.

So far as the Committee is informed, the various insurance programs of the Association now in effect are progressing satisfactorily. No reports of serious complaints with respect to any of them have been received. The insurance field embraces a wide variety of services and developments of new types of coverages are presented frequently. The Committee recommends that the Association continue and encourage the work of an active Insurance Committee.

Respectfully submitted,  
Kenneth G. Lawrence, M. D.  
Chairman

### **Committee on The Care of The Aging**

On September 26th the Committee on the Care of the Aging, composed of Dr. Wm. N. Cochran of Spartanburg, Dr. John A. Boone of Charleston, and myself as chairman, met in Columbia to formulate some recommendations to be presented to the House



of Delegates for action. The following recommendations were adopted by this committee.

1. So that there should be free choice of physicians by the recipient we recommend that those receiving this aid be referred to doctors in this manner. That the same provision be made for further referral to specialists and centers for special treatment.

2. That a doctor may be allowed to refer any patient to the Welfare Department when he deems him worthy of receiving aid to the indigent.

3. Also, we recommend the utmost simplification of forms the doctors must use to report those cases, for the purpose of receiving compensation for his work.

4. We recommend to the Council of the South Carolina Medical Association that they contact Drs. Peebles and McDaniel requesting them to implement and speed up the Pilot Program for home nursing care. The reason for this is that we hope such a program can be established in every county in the State.

5. We recommend that the South Carolina Medical Association try to stimulate interest among civic agencies such as Gray Ladies, Junior Leagues, civic clubs, and like organizations to aid in caring for the aged. This may be done by promoting mainly homemakers' service and clubs for the aged that would provide recreation.

6. Lastly, we recommend that the Department of Public Welfare contact the South Carolina Medical



**DR. J. HOWARD STOKES  
OF FLORENCE  
TREASURER FOR 1960-1961**



**DR. ROBERT WILSON  
OF CHARLESTON  
SECRETARY FOR 1960-1961**

Association and ask for assistance from the association in implementing a program of old age medical assistance. We would like to suggest the names of four prominent doctors the Association could appoint on the committee, namely: Dr. Catheart Smith, Conway; Dr. George Dean Johnson, Spartanburg; Dr. Martin Teague, Laurens; and Dr. Joseph Waring, Charleston.

The Department of Public Welfare is developing plans for the implementation of the Kerr-Mills bill in South Carolina. The South Carolina Medical Association was asked by Mr. Arthur Rivers, Director of the Public Welfare Department, to give advice and counsel to the department. This has been done through a special committee appointed by Dr. Joe Cain.

We respectfully submit this report for publication in *The Journal* and for presentation before the House of Delegates at the April meeting.

R. L. Crawford, M. D.  
Chairman

#### **Advisory Committee to The Woman's Auxiliary**

The Committee found its duties and relationship both pleasant and satisfying.

The Auxiliary is very alert to its responsibilities and purposes in aiding the Medical Association and carrying on certain of its functions.

The Committee was represented by its chairman at the Fall Meeting of the Auxiliary's Executive Board. Projects for the coming year were given considerable attention. From time to time the Auxiliary has called upon the Committee for advice and approval of their undertakings, especially as regards the Kerr-Mills Bill.

The Association is indeed fortunate in having an Auxiliary that is co-operative and anxious to help the Association in every way.

We are

Respectfully,  
O. B. Mayer, M. D.,  
Chairman  
J. Decherd Guess, M. D.  
Richard W. Hanckel, M. D.

### School Health Committee

The School Health Committee of the South Carolina Medical Association met in September, 1960 in Columbia at the time of the meeting of the South Carolina Pediatric Society. Plans were made for a State-wide School Health Conference held in the city of Columbia on Thursday, March 23, 1961. The conference was held at the Bennett Auditorium of the State Hospital through the kindness of Dr. William Hall, Director of that institution.

Dr. Donald A. Dukelow, who is an associate in the Department of Health and Education of the American Medical Association, was the guest speaker at this meeting, and the conference was sponsored by Dr. Hilla Sheriff of the Maternal and Child Health Division of the State Board of Health.

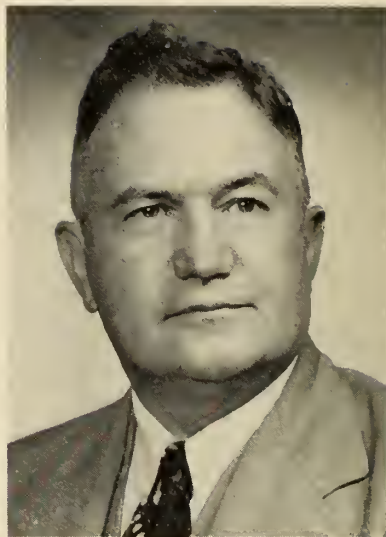
Many of the School Health Committees of the County Medical Societies of the State of South Carolina have been active and rendered valuable counsel and assistance to their local Departments of Education. Reports of the activities of these committees will be received. It is expected that these reports will stimulate members of committees of other local Medical Societies to similar activities during the coming year.

Respectfully submitted;  
J. R. Paul, Jr., M. D.,  
Chairman  
William R. Gamble, M. D.  
Charles R. Propst, M. D.  
Hilla Sheriff, M. D.

### Committee on Liaison with Allied Professions

The committee is happy to report that no new problem or situation has been brought to our attention concerning relations with other professions during the past year.

The only matter presented to the committee for action during the year was a resolution introduced by the Charleston County Delegation at the annual meeting in May, 1959. The Reference Committee to which it was referred recommended that it be referred to the Committee on Liaison with Allied Professions for study. The report of this reference committee was



DR. WILLIAM WESTON, JR.  
OF COLUMBIA  
DELEGATE TO THE A. M. A.

adopted by the House.

The committee has studied the resolution and has investigated the problem of lawsuits against physicians in South Carolina based upon alleged professional negligence and malpractice. There seems to be a marked variation in the number, as well as the percentage increase, of such suits in the different districts in the state. It appears that very little organized effort is being made on the district or county level to improve our relations with the Bar Association.

The committee found that some county societies are having regularly scheduled joint meetings with the Bar members and some district societies are having an occasional joint meeting with the lawyers in the district. There is no evidence of any effort being made to assist or advise a member of the Medical Association who is being sued for alleged professional negligence or malpractice. The committee feels that some service should be available to such persons through special committees of the Association.

It is recommended that the Council of the Association establish District Committees, one in each district, to serve as a Medical Fact Finding Committee in all cases of alleged professional negligence and malpractice. It is also recommended that a state level committee be set up to review the reports of the District Fact Finding Committee and offer assistance when requested.

The Committee on Liaison with Allied Professions urges Council to accept the Resolution introduced by the Charleston Delegation in May, 1959, in view of the fact that the situation is becoming quite serious in all parts of the country. The mechanics and function of a "Medical Liability Defense Program" should be organized and properly instituted.

Respectfully submitted,  
Horace M. Whitworth, Chairman





**DR. GEORGE DEAN JOHNSON  
OF SPARTANBURG  
DELEGATE TO THE A. M. A.**

### **Rural Health Committee**

I regret to say that the Rural Health Committee, as a committee, did not function during the past year due to the masterful inactivity of its Chairman. The Chairman did, however, attend one conference which he wishes to report.

I had the pleasure of attending the First Regional Rural Health Conference, Southeastern States, at the Dinkler Plaza Hotel, Atlanta, Ga., October 7-8, 1960. Having attended two national conferences in the past, I can say that this Regional Conference, although on a smaller scale, was more beneficial to me than the two national conferences.

I was highly impressed with the techniques used in putting on the program. For instance, the subject "Immunization—Why and How" was presented in the manner of a play. The cast consisted of a physician, Dr. Dorothy Jaeger-Lee, Pediatric Consultant with the Georgia Department of Public Health; a mother, Dr. Luella Kline, Atlanta; and a child, William Vangorder, Atlanta. The "whys" and "hows" of immunization were told in dialogue between the mother—who had brought her child to the family physician—and the family physician. It vividly portrayed how important a part a family doctor can play in preventive medicine and how much influence he can have in getting his patients to accept immunizations as a routine matter.

Another feature of the program was the panel-reactor panel method to put across the subject of "Safety—Home, Work, Play" (Alert today—alive tomorrow). After each panel member discussed his topic, a member of the reactor panel gave his "reaction" to the panelist's views plus some views of his

own. Some of the views brought out were: everyone should look out for his own safety as nobody else will to a great extent; the dangers of farm machinery, pesticides, firearms, drowning in irrigation ponds; and hazards in the home. It was suggested that doctors in making house calls should make observations of hazards in the home and call them to the attention of the parents; that first-aid classes be held in rural communities with 4-H clubs and Home Demonstration clubs, etc. Someone made this statement "Make plans like you are going to live forever—work to carry them out like you are going to die tomorrow".

A panelist stated that 1,302,000 people have been killed in auto accidents since 1900 when some fellow in Ohio ran into a sand pit and was thrown out of his car, hitting his head on a tree, and becoming the first statistic from a car accident. The number so far killed is more than have been killed in all of our wars including the Revolutionary War.

Col. William Trotter, Director of the Georgia Department of Public Safety, pointed out that governors on cars may tend to cause accidents rather than prevent them inasmuch as the driver may not have sufficient power when he needs a sudden burst of speed in passing traffic. Safety-speed buzzers are more practical in that they give a warning signal when a certain speed has been reached but you still have power in case of emergency. He stated that although safety belts have been widely acclaimed as a safety measure and were available with most cars sold today, they are not universally used as they should be. A raise of hands showed that practically every one in the audience had read of or knew of the safety of safety belts but only a few hands went up when asked how many had them on their cars.

It was Col. Trotter's belief that public opinion is needed for any law and it is best not to have a law if you don't have public support.

Our own Dr. Julian Price was the featured banquet speaker. His subject was "A Look at the National Scene". Although he had to delay his talk until after the Kennedy-Nixon debate, for which TV sets were provided in the banquet room, he delighted his audience in his own inimitable way.

H. S. Gilmore, M. D., Chairman

### **Coroners-Medical Examiners**

It is recommended that the Committee on Coroners-Medical Examiners be abolished. If, in the judgment of the Association it seems worthwhile to re-examine this question at a later date a new committee may be appointed at a propitious time.

H. R. Pratt-Thomas, M. D.  
Chairman

### **Maternal Health Committee**

The Maternal Health Committee takes this opportunity to express appreciation to the physicians of the state for their cooperation in supplying the information to our committee. In view of the deluge of



forms and reports to be filled out each day, it is understandable that in many instances a detailed analysis of the maternal death by the physician may necessarily be delayed. In order to facilitate the completion of these forms in the future, the committee is in the process of revising its present form. This, as noted, will decrease the amount of time required on the part of the physician to provide the information as well as allow a more detailed analysis of the case by including a form in which most of the information may be reported by checking adjacent to the features applicable in that particular case.

We also would urge each of you who has a maternal death in the future to make every effort to attend the committee meeting as this will be of tremendous value to the committee in analyzing the death in a constructive way. It should also be reiterated that your Maternal Health Committee does not consider itself as a judgment board but rather wishes to present to the attending physician an analysis of the features of the case in hopes that everyone may benefit from the discussion.

The committee also plans an exhibit for the State Medical Association meeting in Charleston and it is hoped that certain pertinent points related to the committees purpose and function may be adequately and accurately expressed at this time.

CAUSES OF DEATH

	Colored	White	Total
Convulsive Toxemia	3	2	5
Non-convulsive Toxemia	7		7
Toxemia of pregnancy with pulmonary edema	1	1	2
Ectopic Pregnancy	5		5
Abortion with sepsis	2		2
Abruptio placentae with afibrinogenemia	3	1	4
Abruptio placentae	1	1	2
Ruptured uterus with hemorrhage	4		4
Retained placenta with hemorrhage	1	1	2
Uterine atony with hemorrhage	2		2
Hemorrhage of undetermined cause	4		4
Cerebral hemorrhage	2		2
Infection	3		3
Embolism	1	3	4
Sickle cell disease	2		2
Leukemia	1		1
	42	9	51

Respectfully submitted,  
E. J. Dennis, M. D.  
Chairman

Committee on Historical Medicine

During the year efforts have continued to obtain and organize material which will form the basis for the history of medicine in South Carolina. Further progress has been made in that the actual writing of the history has begun, and plans for publication may

be considered to be not too far distant. In the meantime the committee requests that the Association make its usual contribution of Five Hundred dollars (\$500.00), which is to be added to the other funds already in the bank to be used for eventual publication expenses, or if the venture should for any reason fail to materialize, to be returned to the Association. It is felt that very likely this might be the last request of the committee for these funds.

J. I. Waring, M. D.  
Chairman

Advisory Committee to The Crippled Children Society

This committee has continued to offer such advice and support as it could to the organization to whose interest it was directed. During the year the chairman and other members have had occasion to confer rather frequently with the executive director of the Society and to offer what assistance they could in what seemed to be a rather critical situation resulting from the announced determination of a rival organization to enter the same field which is covered by the Society. The committee has felt that the activities of the Crippled Children Society in the past have been above reproach, and that the efforts of the other organization have been conducted in a very questionable manner, so that the feeling of the committee has been that the Crippled Children Society should pursue its planned activities and not be deterred by potential division of public interest. There has been an effort to arrive at some understanding between the two organizations, but as yet no definite cooperative plan has been developed. Meanwhile the competing organization has proceeded with plans and is making a definite effort to set up an effective state-wide organization. Whether some sort of agreement of the division of the field of interest can be arrived at, remains to be seen.

The committee is of the opinion that the Crippled Children Society should proceed along the same lines which it has so ably pursued in the past.

J. I. Waring, M. D.  
Chairman

Committee On Revision of Fee Schedule for Services Rendered by Physicians and Surgeons Under Workmen's Compensation Law.

The Committee met at the call of the Chairman, at the offices of the State Chamber of Commerce, Columbia, afternoon of October 23, 1960. Those present were Doctors Owens, Bunch, Siegling and Edwards, as members of the Committee, together with interested physicians of the State Medical Association and representatives of State Chamber of Commerce and of Industry.

The purpose of the meeting was to consider further the proposed fee schedule, in accordance with action taken at the last meeting of the House of Delegates at Myrtle Beach.

After careful consideration of each item of the schedule, resulting in certain revisions which were agreeable to those present, the revised schedule was adopted, subject to approval of Council.

Respectfully submitted,

W. W. Edwards, M. D., Chairman

### The Public Health Committee

The Public Health Committee has not functioned to any extent during the year because it has no function.

Last year the Committee reported; that, in as much as our State Board of Health was at all times under the direct control of the State Medical Association, because of the fact that the majority of the members of the Executive Committee are members of the State Association, the Committee on Public Health really was superfluous and had no function. The Committee therefore recommended that said Committee be abolished or inactivated, pending the possible occurrence of some emergency, which might make its reactivation desirable. No action was taken on the recommendation, and in as much as the opinion of the Committee remains the same, we make the same recommendation this year.

Respectfully submitted;

James B. Berry, M. D.

Douglas Jennings, Jr., M. D.

Robert L. Sanders, M. D.

Robert S. Solomon, M. D.

W. W. King, M. D.—Chairman

### Committee on The Care of The Patient

I have been unable to accomplish anything as Chairman of the Committee on the Care of the Patient. Therefore, I have no report. I did write to several persons concerning this committee, but did not accomplish anything.

V. Wells Brabham, Jr., M. D.

### Committee on Legislation and Public Policy

Your committee on Legislation and Public Policy has kept in touch with the Legislature and our Executive Secretary, Mr. M. L. Meadors. Legislation introduced or proposed for introduction that has come to our attention are the bill to require Polio Vaccination for all children before they can enter school and a bill on Adoption. The South Carolina Medical Association at its 1960 meeting favorably indorsed the Polio Vaccination Bill. This bill is in the process of being passed by the Legislature, barring any unforeseen objection. The bill on Adoption is substantially the same one that has been introduced over the last four years. The chances of the Legislature passing legislation in accordance with the proposed bill is good.

Up to this writing there has been no bill introduced on Naturapaths or Osteopath or similar subjects.

Legislation implementing the bi-annual registration of Doctors was not introduced in the Legislature. Postponement of this was done to more clearly

ascertain the desire of the South Carolina Medical Association.

On the National scene efforts were made to acquaint our national legislative representatives with the fact that the Medical Association approves in principle the Kerr-Mills Bill (Aid tied to Welfare rolls) but opposes the King and Anderson Bills introduced to carry out the Presidents program of tying aid to the aged to Social Security. The State of South Carolina has not as of this date made appropriation to match federal funds in accordance with provisions of the Kerr-Mills Law.

Respectfully submitted,

Committee on Legislation and Public Policy

Dr. J. I. Converse, Greenville

Dr. J. H. Gressette, Orangeburg

Dr. Henry L. LaFitt, Allendale

Dr. Bachman Smith, Charleston

Dr. C. Tucker Weston, Columbia

Dr. Frank C. Owens, Columbia, Chairman

### Committee on Cancer

The attempts of the Committee to ascertain its duties and functions have been futile and therefore the Committee has not met. One member, Dr. Murray Jackson of Conway was interested enough to write concerning a terminal care home for cancer patients in South Carolina and this idea was included in a discussion held in Columbia in the summer of 1960 and attended by our President, Dr. Joe Cain. To my knowledge, there has been no more action along this line.

There was also one letter from Dr. D. E. Ward of Lumberton, N. C. addressed to Mrs. Paul Leonard of the American Cancer Society in Columbia regarding some use of the beds of the North Carolina Cancer Institute in Lumberton by South Carolina terminal



"For a \$5 office call, you could at least find something wrong!"

indigent patients. The Chairman felt that this was not a function of our committee.

In reviewing the reports of this committee for the last several years, it is noted that statistics are largely used regarding various numbers of examined and diagnosed cases of cancer in the Clinics of the State. It is felt that these statistics are available through the State and American Cancer Society and are not here-with duplicated.

Since this committee has no apparent definite assignment, it is respectfully suggested that it be eliminated until a concrete program of action can be established.

Cancer is prevalent in South Carolina. Some cases are being diagnosed, some treated and some neglected.

William C. Cantey, M. D.

**Report to Council of South Carolina  
Medical Association  
by  
Directors of Benevolence Fund**

1) At the May 1960 meeting of the House of Delegates of our State Association a resolution was passed creating "The Benevolence Fund" for the purpose of giving pecuniary aid to indigent and disabled physicians or to the dependent families of deceased or disabled indigent physicians. The Directors of the Benevolence Fund elected at this time immediately organized and have throughout the year, by correspondence, telephone communications, and one meeting, attempted to carry out the provisions of the resolution.

2) The Board thought it desirable to publicize its activities and the purposes for which the Fund was established and it has furnished information about its activities to the State Journal and some of the smaller County Journals throughout the State. It has been brought to the attention of the Womens Auxiliary of the State and the various County Societies alerting them to the creation of the Board setting forth its purposes and urging them to help when necessary. The Board has adopted a set of rules to govern activities for the distribution of gratuities. These rules emphasize the necessity of proper investigation to determine the eligibility as well as the need of the individuals applying for assistance.

At the present time there are two elderly physicians being assisted by the Fund. They have rendered long and faithful service to their communities and both of them are at home now unable by age and disabilities to sustain themselves.

Funds allocated by the Council and by a small amount of assistance from other sources have been temporarily adequate. In hopes of increasing income to the fund the Board of Directors requested Council to have inserted on the annual billheads under the items enumerated in it the caption "Contribution to the Benevolence Fund." No amount would be stated and there would, of course, be no assessment desired. It would be purely a voluntary contribution.

The following is the financial statement setting forth the present status of the Fund as of March 1, 1961.

Initial appropriation	\$ 900.00
Additional amount appropriated,	
October 26, 1960	800.00
Donation—Class of 1910, Medical College of S. C.	50.00
Donation—Sumter County Womens Auxiliary	10.00
	<u>\$1,760.00</u>

**DISBURSEMENTS**

RECIPIENT NO. 1	\$ 200.00
RECIPIENT NO. 2	500.00
BALANCE	<u>\$1,060.00</u>

Payments to recipient No. 2 continue at the rate of \$75.00 per month.

The expenses of making and distribution of mimeographed copies of reports and information pertaining to the work of the Committee have been paid from general funds of the Association.

Respectfully submitted,  
W. Atmar Smith, M. D., Chairman  
O. B. Mayer, M. D.  
Thomas G. Goldsmith, M. D.

**Report of The Executive Committee of  
The South Carolina State Board of Health  
to The South Carolina Medical Association  
Annual Meeting May 1961**

It is regrettable that this report must begin with a triple note of sadness.

Dr. Vivian F. Platt, who had represented the South Carolina Pharmaceutical Association on the Executive Committee since July 1939, died April 13, 1960.

Dr. John R. Claussen, Director of the Florence County Health Department since June 1931, died December 20, 1960.

Miss Elizabeth Davis, Health Education Consultant in the central office, whose public health career began in September 1944 with the Sumter County Health Department, died December 20, 1960.

In the death of each of these loyal, faithful, and dedicated public servants, South Carolina suffered irretrievable loss.

In July 1960, Dr. Ray G. Whitlock succeeded Dr. Platt as the representative of the South Carolina Pharmaceutical Association on the Executive Committee. Except for that change, the membership of the Committee continues with Dr. W. R. Wallace, Chairman; Dr. Frank C. Owens, Vice Chairman; Doctors E. W. Camp, Jr., R. W. Hancel, W. Wyman King, Keitt Smith, J. Howard Stokes representing the South Carolina Medical Association; Dr. L. W. Busbee, the South Carolina Dental Association; Miss Ruth Chamberlin, R. N., the South Carolina Nursing Association; and Attorney General Daniel R. McLeod and Comptroller General E. C. Rhodes serving ex-officio. Dr. G. S. T. Peeples has continued to serve as Secretary and State Health Officer.

The Committee points with pride to the en-



couraging progress of all public health activities in South Carolina during the calendar year 1960, and particularly to the gratifying results achieved through the Hospital Construction Program.

At the beginning of the year the Hill-Burton Advisory Council sent a resolution to the Legislature recommending that it "take into serious consideration the health needs of our State." Some of the needs were listed as follows:

"(1) Using a standard of 5 mental beds per 1000 population, and an estimated State population of 2,346,000, South Carolina needs an additional 9,618 beds for mental and retarded patients; (2) with the increased span of life and large number of geriatric patients the problem of care for our senior citizens in nursing homes is increasing daily. On the basis of three beds per 1000 population our State needs an additional 6,198 nursing home beds; (3) there have been Federal matching funds available for the construction of rehabilitation centers for the past four years; however, due to the lack of eligible sponsoring agents in South Carolina, these funds have been transferred to sister Southern states. South Carolina needs eight such centers and has none.

"We respectfully recommend that the State Legislature consider the use of any available funds for allocation to these great needs of the fine citizens of our State."

Allocations to the State Board of Health for the fiscal year 1960-1961 under the Hill-Burton program, together with a reserve fund accumulated during the fiscal year 1959-1960, totaled \$4,832,750.15.

On September 14, 1960, the Executive Committee of the State Board of Health, on the recommendation of the Hospital Advisory Council, set aside the following amounts for the construction of medical facilities listed below:

Type Facility	Approximate Percentage Distribution	Allotted
General Hospitals	54	\$2,192,595.56
Tuberculosis	0	
Mental	31	1,258,712.27
Health Center	10	406,036.21
Reserve	5	203,018.11
		<u>\$4,060,362.15</u>

The U. S. Public Health Service authorized the State Agency to encumber 1960-1961 Hill-Burton funds in the following amounts for the construction of:

Diagnostic & Treatment Centers	\$146,796.00
Chronic Disease Facilities	146,796.00
Rehabilitation Facilities	239,398.00
Nursing Homes	239,398.00
	<u>\$772,388.00</u>

During the period 1947-1960, nearly \$71 million dollars, of which over \$33.5 million took the form of grant-in-aid Federal funds under the Hill-Burton Program, have been or are currently being expended in this State to provide 23 completely new hospitals, 66 hospital beds or adjunct facility additions, 29 main health centers, two additions to health centers, 58 auxiliary health centers, three nursing homes, eight nurses' residences, four nurses' residences and training schools, and two mental health clinics. These projects have provided 4,802 additional beds as well as new and improved facilities for the diagnosis, treatment, and care of patients and for the teaching and training of personnel in the medical field.

The table below depicts the results of the statewide survey of all hospital and related medical facilities prepared for the 1960-1961 Revised State Plan for Hospital Construction for South Carolina, approved by the Surgeon General of the U. S. Public Health Service on August 30, 1960:

TABLE "A"

	Existing Acceptable (Beds)	Total Authorized Under Laws (Beds)	Needed (Beds)	% of Need Met
General	6,636	10,788	4,152	61.51
Tuberculosis	877	1,054	177	83.21
Mental	2,127	11,815	9,688	18.00
Chronic	189	4,726°	4,537°	4.00
Nursing	860	7,089°°	6,229°°	12.13
	<u>10,689</u>	<u>35,472</u>	<u>24,783</u>	
	(Centers)	(Centers)	(Centers)	
D & T	50	236	186	21.19
Rehab.	0	8	8	0
PHC				
Main	37	46°°°	9°°°	80.43
Aux.	77	244°°°	167°°°	31.56

° 2 Beds per 1000 population  
°° 3 Beds per 1000 population  
°°° Programmed

The above table represents the unmet needs in this State for medical facilities. Considerable progress has been made in the past thirteen years, yet much remains to be done in meeting the growing need and demand for adequate modern medical treatment facilities in sufficient number for all citizens and sections of South Carolina.

In addition to administering the Hill-Burton Program, the Hospital Division of the State Board of Health inspected and licensed 103 general hospitals, six institutional general infirmaries, 61 nursing homes, and seven institutional nursing infirmaries. Hospitals or institutions that provide care, treatment, or training for the mentally ill, mentally defective, epileptic, drug addicted, or alcoholic are not included in the above count, in that they are licensed by the South Carolina Mental Health Commission.

The State Board of Health has continued the routine services for early diagnosis, prompt treatment and long-time follow-up of patients cared for through the sections of Cancer, Heart Disease, and Tuberculosis Control. We are happy to report that there has been a decrease in the incidence and mortality from tuberculosis during the year; however, during the same period the incidence and mortality from cancer and heart disease have remained fairly consistent. Nevertheless, in females a higher percentage of early cancer cases is being diagnosed than in the past. We believe that this factor will be reflected by a decrease in cancer mortality in females within the next ten years.

In the fall of 1960, the Heart Disease Control Section joined with the South Carolina Heart Association in conducting a research project which is designed to provide heretofore unavailable information concerning lay education. Supported by grants from the American Heart Association and the U. S. Public Health Service, the project will determine the public's knowledge about two specific areas of heart disease, coronary and rheumatic, and whether this level of knowledge can be favorably influenced by intensive educational efforts.

Trained interviewers will survey a minimum of 1600 households in eight counties in the Piedmont area of South Carolina to establish a base level of knowledge. Intensive educational and informational efforts will then be applied to the six test counties during a two-month period. A second survey of 1600 additional households will enable a comparison of the effectiveness of methods and materials used and is expected to be of value to every individual or agency concerned with public information and communication.

An increasing number of private physicians are requesting prophylactic drugs from the State Board of Health for their indigent patients with rheumatic and/or congenital heart disease.

The State Board of Health, in cooperation with local health departments, Pinehaven Tuberculosis Hospital in Charleston, and the U. S. Public Health Service, plans to begin in early 1961 a special Tuberculosis Project aimed at the elimination of tuberculosis as a public health problem in Charleston,

Berkeley, Dorchester, Colleton, Beaufort, Jasper, and Hampton counties. Services will be extended to tuberculosis patients and their families so that active cases may receive prompt hospital and/or outpatient therapy. Efforts will also be accelerated to bring contacts of newly discovered active tuberculosis patients to early examination, follow-up, and treatment as needed. Also, prophylactic treatment with INH for one year will be provided for infants under one year who are reactors to tuberculin and for children from one to three years who have, in addition, X-ray evidence or primary tuberculosis.

The State Board of Health's Division of Disease Control continued surveillance on poliomyelitis, typhoid fever, malaria, typhus fever, and any rarely occurring communicable or vector borne diseases. This program has been very successful as shown by the fact that with the cooperation of the county health departments completed epidemiological investigation records have been obtained on almost 100% of reported cases of the above diseases.

The epidemic occurrence of influenza which began in late 1959 and continued through March 1960 was of the Influenza A Strain, as shown by laboratory examinations submitted on patients. This was the first epidemic of this disease since that of the Asian Strain in 1957.

There were 130 cases of poliomyelitis in 1960 compared with 88 cases in 1959. The cases this year were concentrated largely in the Piedmont section of the State, with 68 cases occurring in Cherokee, Spartanburg, and Union counties. Cases were reported from 21 other counties. Of these cases 58.7% occurred in children under five years of age, and 21.8% in those 5-9 years of age. No cases were reported in individuals forty years of age and over. Of the 90 paralytic cases, vaccination status was determined in 87 of them. Of these, 59, or 67.6%, had had no vaccine, and nine, or 10.5%, had had three or more doses. Of the 38 non-paralytic cases, the vaccination status was determined in 36 of them. Of this number, 20, or 55.8%, had had no vaccine and 9, or 25.0%, had had three or more doses. This distribution of cases and the vaccination status indicates the need for emphasis on vaccination of children under five years of age of parents in the low socio-economic group in South Carolina. The occurrence of cases in children who have had three or more doses would indicate the need of booster doses. More than two and one-half million doses of vaccine have been given in South Carolina since the introduction of the vaccine, and this number probably does not include all of the doses given by private practitioners of medicine. According to records of vaccination reported to the State Board of Health, it is estimated that 62% of the children under five years have had three or more doses, 20% have still had none. The school age population, 6-14 years of age, is better than 82% protected with three or more doses of vaccine, and the 15-19 year-old age group is about 50% protected with three or more doses.

Not a single case of malaria and one case of murine

typhus was reported during the year. There have been no cases of smallpox since 1947. One case of leprosy was reported in a native South Carolinian who was presumed to have contracted the disease in the South Pacific during World War II.

Hepatitis has been increasing in recent years and occurred in unusual numbers of cases in a few counties this year. For the most part the cases were family outbreaks widely scattered throughout the counties. No common source of infection was determined.

The care of the chronically ill and aging has received considerable attention from the State Board of Health. The study in four counties was continued to determine how great a part the local health departments can have in this problem confronting the medical profession. In addition, the Division continued its work with the nursing home operators leading to the improvement of patient care in the nursing homes. It is proposed to add two nurses and a dietitian to the staff to work with nurses and dietary personnel in the nursing homes.

Rabies continued to decline in 1960, with only fifteen positive heads being found by the Laboratory and only 440 persons in the State receiving anti-rabies treatment. This is an all-time low for South Carolina.

The Vector Control Program continued to be popular and to provide satisfactory control of insect vectors of diseases. Forty-three of the 46 counties participated in the program.

There has been a consistent rise in the cases of early syphilis reported during the past year, 30% of which has been reported among teen-agers. This we attribute to better reporting by private physicians, more concentrated efforts in case finding by field personnel, evidence of more and more homosexual activities among patients, contacts, and suspects, and many other factors.

The Declomycin Study which was initiated last year is nearing its completion; and so far, this antibiotic, while more expensive than penicillin, appears to be a satisfactory oral substitute for penicillin sensitive patients. A detailed report will be rendered at a later date.

Our system of rapid communication with other state health agencies relative to contacts of early syphilis by means of telegraph and long distance telephone continues to operate most effectively. This has resulted in almost immediate institution of epidemiologic procedures in the state or states concerned in bringing named contacts to diagnosis and treatment.

Training of personnel during the past year has been one of the major activities in the Venereal Disease Program. This has included a Venereal Disease Seminar for public health nurses, courses of instruction for Venereal Disease investigator field personnel, and the teaching of interviewing techniques to Venereal Disease staff and also county health personnel through the medium of closed circuit television and tape recordings. Results from these activities have been most gratifying.

Three resolutions were proposed by the South Carolina Venereal Disease Control Section at a U. S. Public Health Service sponsored seminar in Memphis last year and were formally adopted. These resolutions were in substance:

1. That the Public Health Service make available to all states a course in Darkfield Microscopy for field Venereal Disease Interviewer-Investigators.
2. That the U. S. Public Health Service arrange for an interstate system of Venereal Disease control relative to crews of vessels plying the coastal waters of this country, which would include the Atlantic, Gulf, and Pacific coasts, and the St. Lawrence seaway. This recommendation stemmed from our experience with the maritime program in Charleston which indicated the necessity for such a national procedure.
3. That efforts be made in all states to interest hospitals in securing serological tests for syphilis on all admissions and on their out-patients. As a result of this resolution, proposals have been submitted to the Hospital Board of Accreditation to make such testing a routine requirement.

We are pleased to state that at the Public Health Service sponsored seminar in Dallas, February 28 - March 3, 1961, and consisting of thirty-seven states and two foreign countries, South Carolina was officially recognized and commended upon the operation of its Venereal Disease Control Program.

The Maternal and Child Health Division has continued its efforts to promote better facilities and services for the health of all mothers and children in South Carolina through a program of service and education.

A total of 18,415 mothers received services at maternity medical clinics during 1960, and public health nurses visited 8,033 mothers before and after delivery.

There were 1,044 child health clinic sessions with 8,105 new patients registering for service, with 15,663 patients returning for service. In addition to these clinic sessions, nursing conferences were held in every county and supplemented by nursing visits into the homes when indicated.

Assistance has been given to the local health departments in conducting preschool clinics prior to the admission of children to school. Programs of parent education with emphasis on readiness for school and medical supervision for their children are encouraged in areas over the State, and assistance in carrying out these programs is given.

Continuous efforts have been made to strengthen and expand school health services through consultative services and in-service education to school and local health department personnel. The vision screening program has been extended to include approximately twenty-one counties. A course in school nursing carrying three semester credits, sponsored and financed by the MCH Division was offered at the University of South Carolina at its summer session,



June 1960. Nineteen nurses from various county health departments took this course.

Biologics for protection against diphtheria, tetanus, whooping cough, polio, and smallpox, and also Schick testing materials, are purchased and distributed free to all county health departments. Silver nitrate is furnished to midwives for use in the eyes of the newborn babies whom they deliver.

The overall supervision and training of midwives in the State, with two institutes held during the year, have been continued. A total of 746 midwives are certified for practice and enrolled in monthly classes.

Continued efforts have been carried on to reduce the number of accidents, childhood's greatest killer. Reports on all cases treated in the two poison control centers have been forwarded to the National Clearinghouse for compilation in nationwide studies. Follow-up on the cases through the local health department personnel has been a worthwhile basis for education in prevention. A full-time public relations representative assigned to Richland County to develop a pilot program has worked diligently on this program and has also performed some service on a statewide basis.

With the steadily increasing number of hospital deliveries and the overcrowding of nursery facilities, the professional staff has spent a great deal of time assisting various hospitals in improving nursing techniques and standards of care for mothers and babies. Consultative services have been given on the control of staphylococcus infection in newborn nurseries and on plans for remodeling and equipping nurseries. Further emphasis has been placed on developing and extending the coordinated program for the care and counseling of maternity patients seen in the outpatient departments, in the maternity wards of hospitals, and in the local county health departments.

A joint project has been developed in both Berkeley and Beaufort counties by the respective county health department, the departments of Obstetrics and Pathology of the Medical College, and the MCH Division. Bi-monthly clinics in each of the county health departments where all prenatal patients with abnormalities can be referred have been established and are staffed by the physicians from the Obstetrical Department of the Medical College and the local public health nurse. Papanicolaou smears are taken routinely and examined by the Pathology Department of the Medical College. Several early cases of cervical malignancy have been discovered through the clinic and subsequently treated at the Medical College Hospital as have other abnormalities diagnosed through the clinic.

A paper and scientific exhibit on phenylketonuria was presented by the Director of the MCH Division at the South Carolina Chapter of the American Academy of General Practice at its annual meeting. Numerous requests for copies of this paper have been received from physicians over the State and several from out of State.

The Division has continued to sponsor postgraduate education for physicians and nurses. Thirty-six physi-

cians and three nurses from South Carolina attended the Obstetric-Pediatric Seminar held in Florida. This seminar is accepted for informal credit by the South Carolina Academy of General Practice.

As of December 31, 1960 there were 5,432 patients on the Crippled Children's Program. During the calendar year 1960, 4,038 patients made 10,389 clinic visits; 618 patients spent a total of 9,619 days in the hospital; 118 patients received a total of 13,392 convalescent home days; 158 patients were discharged as cured.

The Crippled Children's Division has continued its regular diagnostic and treatment services through its clinic, hospitalization, convalescent and appliance programs.

Elimination of financial responsibility for transportation, increase in insurance reimbursements, and a slight increase in State and Federal appropriations enabled the Crippled Children's Division to continue to operate at full capacity to the end of the fiscal year for the first time in three years. Since curtailment was not necessary our clinicians were enabled to provide continuity of medical care and the program operated much more smoothly.

The Convalescent Home has run at full capacity all the year, having served a total of 118 patients. Although Convalescent Home stay was kept at a minimum number of days, we were still faced with a waiting list of 5 - 6 patients toward the end of the calendar year. A Home with additional staff and facilities would save materially on hospitalization.

During the month of July 175 children (83 white and 92 Negro) attended the two orthopedic camps made possible by special grants of the Legislature since 1948. The 1960 season included training in use of upper arm prostheses; self-feeding; dressing and general care of self; gait training, crutch walking, etc.

The program for congenital heart disease patients has continued to increase — 182 children were seen during 1960. During the first six months of the program 14 had cardiac surgery; 22 had cardiac catheterization; 34 were hospitalized for treatment and diagnosis. The Division is delighted that the Children's Bureau arranged to help with such a much needed program.

The Rheumatic Fever Clinic established in Florence about a year ago has relieved somewhat the overload of cases in the Columbia area and has provided more easily accessible services for the Pee Dee Area.

A monthly Rheumatic Fever Clinic has been established in the Orangeburg area, thus making services more readily available in this area. The nurse and clerk from the Charleston Rheumatic Fever Clinic go to Orangeburg to hold the clinic which is staffed by the pediatrician from the Charleston Clinic and an Orangeburg pediatrician.

A special burn project has been started at the Medical College Hospital by the staff plastic surgeon for the treatment of acute burns. In a few instances where local facilities were not set up to treat such cases, the Crippled Children's Division has accepted

referrals from local physicians and has hospitalized these children at the Medical College Hospital Burn Center. These children have responded exceptionally well to early treatment at this facility. It is hoped that additional funds may be received for the early treatment of burns.

We are pleased to report that 4,038 patients of the 5,432 registered on the program were served during this calendar year. We believe that this indicates an honest and sincere effort on the part of all Division personnel to carry out the goals of the program.

The Division of Dental Health operates on the assumption that available personnel, facilities, and funds should be used in the most effective way to bring about the greatest improvement in the dental health of the people of South Carolina.

One of the most important projects of the Division has been to encourage and assist local communities to obtain fluoridation of their public water supplies. The town of Chesterfield began fluoridation on January 11, 1960. There are 17 cities and/or towns adjusting their public water supplies to the optimum level of 1.0 ppm fluoride. This decay-preventing measure has been made available to 154,119 persons in the State.

The Division continued to operate the mobile dental trailer for the purpose of applying topical applications of sodium fluoride to the teeth of children in the elementary schools. The mobile dental unit travelled to 23 schools in the State performing this service. In addition to these schools, fluoride treatments were given in Spartanburg, Richland, and Pickens counties, where each county conducts a sodium fluoride program in the schools of their respective county.

Upon request, packages of sodium fluoride powder, sufficient to make eight ounces of a 2% solution of sodium fluoride, and stannous fluoride for topical applications to children's teeth were given free to the dentists in South Carolina.

Permanent dental clinics continued to operate in Spartanburg and Richland counties. A total of 25,370 dental corrections were reported by these clinics.

The "Little Jack" mouth health puppet show played its eighteenth consecutive year, visiting 370 schools and appearing before 124,867 children. Three performances were given daily for five days in each county visited.

The Director consulted with lay and professional groups during the year. These groups included parent-teacher associations, dental societies, town councils, and civic clubs. Newspaper articles relating to prevention and control of dental diseases were sent to newspapers for publication at appropriate times. Dental health educational materials were prepared and distributed to the teachers in the elementary schools upon request.

During the 1960 observance of National Children's Dental health educational materials were prepared and of educational activities, including illustrations and demonstrations, were used to both publicize and emphasize a need for continued improvement in chil-

dren's dental health. The observance was planned and directed by the following committee on Dental Health and Public Relations of the South Carolina Dental Association, with the valuable assistance of Dr. James R. Owings, President of the Dental Association: G. A. Bunch, Chairman; C. E. Calcote, F. B. Hines, Jr., R. J. Hursey, Jr., and R. H. Poole. A memorandum from Dr. Jesse T. Anderson, State Superintendent of Education, was mailed to all South Carolina educators, asking their cooperation in the promotion of National Children's Dental Health Week. Pamphlets, speeches and other dental health materials were mailed to dentists, upon request, who had been invited to the schools to speak on the subject of dental health. Spot announcements, in observance of Dental Health Week, were used on the radio and television stations in the State. A dental hygienist from the State Board of Health appeared on the "Cactus Quave" television program for children to demonstrate the proper technique of brushing the teeth. Each child on the program that day received a toothbrush and dental health information on the proper care of the teeth.

During the past year, the Division of Local Health Services has discharged its responsibilities of assisting county health departments in developing and carrying on a well-balanced program of activities which included all the objectives of the State-wide public health program and, in addition, those objectives that were needed to meet specific local health needs. Service was rendered in the allocation of State and Federal funds to the individual counties in keeping with the provisions of the Appropriation Acts, assisting each county in the preparation and administration of its annual budget, and in justifying and securing local appropriations. Counties are kept informed of new laws and regulations pertaining to health.

The Division of Local Health Services has helped with recruitment, orientation, and training of personnel employed in the county health units. With the assistance of the State Supervising Nurse and the Chief Sanitarian, county public health nurses and sanitarians have been given guidance in their local program planning of nursing and sanitation services.

Quarterly meetings of all health officers and administrative assistants have been held to discuss problems which the health officers themselves feel the need of discussing in groups where broad objectives and policies can be developed.

In-service training has been provided public health workers through workshops and conferences conducted by the various divisions of the central office and regularly scheduled district meetings. A number of county health nurses attended the one-month courses in "Principles and Practices of Public Health Nursing" and "The Public Health Nurse in a Maternal Health Program" and others attended one or more of the one-week study courses offered by the School of Public Health, University of North Carolina, in cancer, tuberculosis, chronic diseases and accident prevention.

One of the greatest needs is for sufficient funds to enable the State Board of Health to employ person-



nel with adequate training in public health (there is an acute shortage of trained public health workers) or to employ personnel with good basic education and then have the means of assisting them in securing public health training. No State training funds have been available since 1951. At the present time (March 1, 1961) eleven counties are without health officers and are being served by administrative assistants who have been appointed to have administrative responsibilities for property, supplies, the signing of official communications, liaison with county delegations, and with the public in matters concerned with public relations. The administrative assistants are under the guidance of the Director of Local Health Services. The remainder of the 35 local departments are served by 22 full-time health officers and three part-time health officers. Of these 23 full-time health officers, six are seventy or more years of age. There are nine bi-county units, one tri-county unit, and the remainder are single county units. The tri-county unit is served by one full-time health officer. Each of the bi-county units has a full-time health officer and the remainder are served by a single full-time health officer or a part-time health officer, exclusive of the eleven which, at the present time, do not have the services of a health officer. The county staffs consist of approximately 205 public health nurses, 100 sanitarians, and 129 full-time clerks.

The three-day orientation course for new employees which was established in 1959 was continued in 1960. The program is held in Columbia every six months for the purpose of acquainting new employees with programs, policies, and procedures of the State Board of Health.

The Public Health Education Section has carried out educational and informational activities, providing consultative and direct services in methods and techniques of health education, and preparing and distributing all types of informational and educational materials for the divisions and sections of the State Board of Health, individual staff members, local health units, community groups and organizations, private physicians, and other individuals.

The enforcement of the laws and regulations governing the prescribing, dispensing, and sale of narcotic, barbiturate, and other drugs and medications restricted to sale at retail, on the prescription of a duly licensed physician, dentist, or veterinarian, was vigorously pursued through the office of the Chief Drug Inspector of the State Board of Health. In making routine investigations of pharmacies, hospitals, and nursing homes, numerous violations have been found, resulting in prosecutions and convictions.

A total of 42 complaints were filed during the year, of which 24 were for violation of the Uniform Narcotic Act. Of these 24 cases, 19 have been convicted with six pending before the courts. Twelve complaints were filed charging violation of the Barbiturate and Dangerous Drugs Act. Of these, 5 have been convicted and 7 are pending before the courts. One physician was charged with practicing medicine while

under the influence of drugs. This case is pending before the courts. Three complaints were filed charging unlawful operation of a pharmacy, resulting in one case pending before the courts and two convictions. Two persons were charged with unlawful dispensing of prescriptions, with 1 conviction and 1 pending.

Four physicians were found in violation of the Narcotic Act in that they were issuing false prescriptions and using their official order forms to obtain narcotic drugs for self-gratification. All were permitted to surrender their Special Tax Stamps, order forms, and narcotics on hand. No prosecutions were instituted pending treatment. One veterinarian was found in violation in the same manner and was permitted to surrender his Special Tax Stamp and order forms without prosecution.

Four informations were filed with the Board of Medical Examiners, 7 with the Board of Pharmaceutical Examiners, 4 with the Board of Nurse Examiners, and one with the Board of Veterinary Examiners. These professional licensing boards took administrative action in all cases reported to them. Probationary action was taken by the Board of Medical Examiners and the Board of Veterinary Examiners against the members of their respective licentiates. The Board of Nursing Examiners cancelled one license and suspended three licenses. The Board of Pharmaceutical Examiners suspended 5 licenses for periods of four to eight months with three-year probationary reinstatements. One license was suspended indefinitely and one license was cancelled.

This office is most appreciative of the excellent cooperation it has received from the various professional licensing boards, state, county, and municipal law enforcement agencies, and the Federal Bureau of Narcotics.

The services of the Central Laboratory of the State Board of Health and of the district and county laboratories have been directed to the prevention of disease and the provision of diagnostic facilities where needed by physicians, hospitals, and clinics, as well as county health departments, in the diagnosis and control of diseases of public health significance.

The Central Laboratory performed a total of 309,459 tests and examinations. In this figure are included 249,207 serological tests for syphilis, 57,061 general bacteriological and immunological tests, 3,183 tests for viral (exclusive of rabies) and rickettsial diseases, 452 examinations for Negri bodies, and 52 special bacteriological and immunological tests in connection with the diagnosis and control of rheumatic fever, of which 26 were carried out with fluorescent antibody techniques.

Use of the fluorescent antibody technique was introduced into this Laboratory in the fall of 1960, following special instructions received by our Senior Bacteriologist at the Communicable Disease Center and receipt of the necessary equipment, including essentially the microscope (quadruple magnification), condenser, fluorescence lamp, protective filters and



accessories, and reagents acceptable to the Communicable Disease Center, with whose collaboration this work has been initiated as an important part of the services now available in the State Board of Health Laboratory. Fluorescent antibody techniques, for which a vast field of usefulness can be foreseen in the diagnosis of infectious diseases, are now well established in the diagnosis of streptococcal infections significant in the control of rheumatic fever. The initial study with the use of fluorescent antibody equipment in this Laboratory has been in connection with the Heart Disease Control program and has consisted of correlation of methods of identification of the Beta Hemolytic Group A Streptococcus by long-established cultural methods with results of the fluorescent antibody method. Cultures from 26 cases were examined by both methods through December 31, 1960. Group A Streptococci were identified in ten cases, with correlation in all. Time is saved by fluorescent antibody methods, which made possible in a period of hours the identification of the organism, formerly requiring days. This study is being pursued, cultures being received from rheumatic fever clinics, county health department clinics, and physicians located in various parts of South Carolina.

Work in the Viral and Rickettsial Section of the Laboratory has included the study of 190 cases of clinically diagnosed or suspected poliomyelitis, the diagnosis being confirmed and type identified in 88 cases predominantly occurring in three northwestern counties, revealing 68 cases of Type I, 18 of Type III, and two sporadic cases of Type II. Four cases of Coxsackie virus infection with neurological manifestations were identified, including Types B-2, 4, and 5.

Of 462 animal brains examined, Negri bodies were found in 15, or 3.46%; and in one brain revealing no Negri bodies the diagnosis of rabies was proved by mouse inoculation, carried out at the Communicable Disease Center of the U. S. Public Health Service. This finding is in accord with the established fact that the slower (3 weeks) mouse inoculation test for rabies will yield positive results in a small percentage of cases in which the rapid method by examination for Negri bodies will yield a negative. The 16 animal brains in which positive evidence of rabies was found were received from seven counties in the East Central portion of the State. This is the area in which a persistent focus of rabies was noted in 1959, during which year a marked reduction throughout the State as a whole had been observed. These figures are exclusive of 44 examinations for Negri bodies in the Charleston County Health Department Laboratory, including 43 showing negative results and one positive, all confirmed by mouse inoculation. Investigation of the positive animal case indicated that the origin was not in Charleston County, or in the southeastern area of the State.

In the Milk Testing Section of the Laboratory, the split milk sample program is continued with current collaboration of eleven milk testing laboratories throughout the State. Testing for antibiotic residues

in milk is now carried out routinely on pasteurized milk samples in the Central Laboratory and in the four district laboratories. The work of the Central Laboratory in testing milk samples by cryoscopy has been expanded.

Use of the millipore filter method in testing water samples is now established as a standard method. It is now used in this Laboratory and studies are being carried out to show its correlation in our Laboratory with the multitube fermentation method.

In the field of immunology, tests for the Rh factor, for which blood specimens are received from prenatal clinics and other sources where prenatal examinations are made, have increased by 31% in the past two years and by 57% in the past three years, to a total of 15,961 performed in 1960. This increase has necessitated additional study of the special precautions essential in handling a large number of blood specimens daily for a test of this type, involving a factor subject to changes in the erythrocytes, a closely timed technique, and considerations relative to deterioration of specimens for this purpose in transit. In addition to those tested in the Central Laboratory, 884 blood specimens were tested for the Rh factor in several of the district and county laboratories.

A total of 47,097 tests and examinations were performed by the four district laboratories at Anderson, Florence, Spartanburg, and Walterboro, and the four county health department laboratories at Charleston, Greenville, Laurens, and Sumter.

The Division of Sanitary Engineering of the State Board of Health is responsible for the administration of health programs from a state level and participates in other programs handled principally by the various counties throughout the State. One of the main functions of this Division in connection with county programs is to furnish, upon request, consultation services on public health problems. Total efforts are directed toward a cooperative program embracing this Division and the various county health departments.

This Division is divided into sections, each with specific responsibilities, including the administration of rules and regulations and/or laws governing activities which normally might be indicated by the section titles:

Water Section

Sewage Section

Food Processing Section—Wholesale & Retail

Bedding Section

Milk, Shellfish, Bottling Plants, & Frozen Dessert Section

In addition to the specific activities listed above, many public health problems cut across all sections enumerated and impose other responsibilities upon the Division; for instances, responsibilities in connection with the planning and development of subdivisions throughout the State; the consideration of public health implications in the proper planning of schoolhouse construction, motels, swimming pools, trailer parks, organized camps, etc.; industrial de-

velopment, and many other projects of similar connotation.

The State Board of Health, in cooperation with the Water Pollution Control Authority, has developed an effective Radiological Laboratory, designed to monitor the environment generally and to perform specific duties as may be indicated in connection with the utilization of radioactive material for any purpose throughout the State.

There is strong liaison between the Engineering Division and the Water Pollution Control Authority. All matters of mutual interest are discussed in the light of common benefit, leading to an appropriate solution for the betterment of health conditions throughout the State.

Our observation of the operation of this Division indicates that we should emphasize that additional personnel is needed to keep pace with the ever-expanding industrial picture in South Carolina and the attendant problems with explosive population increase.

The program for registering births, deaths, fetal deaths, and marriages shows a slight over-all increase for 1960 over 1959. There has been a decrease in the number of births filed for 1960, but the increase in the numbers of deaths and marriages combined is greater than the decrease in births. The department is currently registering and housing approximately 132,500 vital records annually, which represents an increase of approximately 93% compared to the calendar year 1945. The demand for services by the public in general, the medical profession, public agencies, industries, and various types of civic organizations continues to increase. Requests for statistical data showed a marked increase for the year 1960.

There has also been an increase in the legal transactions involving the records of the department. For example, there were 1,453 certificates amended as a result of adoption, which represents an increase of approximately 150 over the previous year; 792 certificates amended as a result of the father marrying the mother after the birth of the child, representing an increase of approximately 290 over the previous year; 210 certificates amended through orders of courts of competent jurisdiction, representing an increase of approximately 100 over 1959. This last figure represents orders for name changes primarily. The program involving the filing of delayed records of birth and the correction of original records remains at about the same level as reported for 1959. The department files approximately 6,500 delayed records of birth per year and makes approximately 15,000 corrections in existing records per year.

Bills for filing divorce and annulment data with the Bureau of Vital Statistics and for the addition of more data on marriage records were defeated in the 1960 session of the General Assembly. A bill for the filing of divorce and annulment data with the Bureau of Vital Statistics has been presented to the 1961 General Assembly and is presently in the

Judiciary Committee of the House of Representatives.

During the calendar year 1960 the Bureau of Vital Statistics has participated in several special research projects, examples of which are a special study of Cleft Palate by the University of Denver in Colorado; the Heart Associations' special project for setting up sampling procedures, etc., to test the knowledge of citizens of the northwestern section of the State relative to heart disease; a study on heart deaths being made in Charleston County; a study with the U. S. Public Health Service on matched infant deaths during the census year; a study of neonatal and perinatal deaths by the South Carolina Medical Association's committee on Infant and Child Health; a study by the Bureau of the Census in which deaths occurring after the 1960 census of population are to be matched to the enumeration record and the Johns Hopkins University School of Hygiene and Public Health special study on radiation in connection with the deaths of physicians.

Quick and accurate tabulations necessary to the operation of the State Board of Health have been made available through the punch cards and IBM tabulating machines in the Tabulating Unit. In 1960 the following items have been added to the tabulating unit program: (1) long distance telephone records, (2) gonorrhea reporting by private physicians, and (3) statements of earnings and deductions to all employees at intervals.

The year 1960 brought about the complete revision of the compensation plan. This change was necessary due to the cost-of-living salary adjustments authorized by the Legislature.

As of December 31, 1960, the Personnel Officer reports that although the agency is still experiencing difficulty in filling vacancies in several specialized fields such as health education, medical, and laboratory technicians, the general picture of turnover in personnel seems to have leveled off somewhat during the year.

Additional benefits have been made available to employees in the group insurance plans, and an increasing number of employees are participating through the payroll deduction plan.

All purchasing and distribution of supplies and drugs and handling of insurance, leases, rents, mail and telephone service, physical maintenance, and inventorying of State Board of Health properties are the responsibility of the Business Management Section. The Finance Section is responsible for all accounting and financial records, certification of availability of funds for purchasing items, preparation of budgets, estimates of funds for the State Health Officer, and payment of bills.

The total funds from all sources expended through the State Board of Health during the fiscal year ending June 30, 1960, amounted to \$11,813,015. Included in this total are the allocations to the State Board of Health for the fiscal year 1960-61 under the Hill-Burton Program.

## The Report of The Treasurer

South Carolina Medical Association  
Florence, South Carolina

### Balance Sheet December 31, 1960

#### Assets

#### Current Assets:

Petty Cash	\$	205.00	
Bank		13,269.54	
Accounts Receivable		<u>2,729.26</u>	
Total Current Assets			\$ 16,203.80

#### Investments:

Peoples Federal Savings and Loan Assn.		10,586.06	
Investors Mutual Fund	\$47,547.61		
Investors Stock Fund	<u>19,740.88</u>	<u>67,288.49</u>	
			77,874.55

#### Fixed Assets:

Furniture and Fixtures			8,340.40
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#### Other Assets:

Deposits			3.00
Total Assets			<u>\$102,421.75</u>

#### Liabilities

#### Current Liabilities:

Withholding Taxes	\$	245.38	
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#### Surplus

Balance		89,379.29	
Excess of Revenue Over Expenses		<u>12,797.08</u>	
Total Surplus			102,176.37
Total Liabilities and Surplus			<u>\$102,421.75</u>

South Carolina Medical Association  
Florence, South Carolina  
Statement of Revenue and Expenses  
January 1, 1960 to December 31, 1960

#### Revenue:

A. M. A. Dues	\$30,625.00	
Membership Dues	34,365.50	
Subscription Dues	3,903.50	
A. M. E. F. Receipts	6,207.85	
Advertising	39,518.92	
Permanent Home Fund	6,357.50	
Miscellaneous Income	1,475.76	
Benevolence Fund	50.00	
Directory of Members	216.00	
Interest and Dividends	<u>1,713.36</u>	
Gross Revenue		\$124,433.39

#### Less-Expenses:

A. M. A. Conventions	1,528.22	
Dues and Subscriptions	368.40	
News Letter	447.10	
Insurance	711.49	
Office Supplies	<u>810.41</u>	

#### Journal:

Printing and Expense	30,373.51	
Pro-Rated Salary	<u>305.00</u>	30,678.51

#### Salaries:

Editor	3,000.00	
Executive Secretary and Counsel	10,000.00	
Secretary and Others	<u>7,867.50</u>	20,867.50
Postage		859.90
Telephone and Telegraph		1,578.48
Travel Expense		1,741.71
Audit and Legal		620.19
Public Relations		
Expense and Conferences		746.12
Rent		1,200.00
Taxes - Payroll		365.15
Refunds and Transfers		1,538.75
Miscellaneous Expense		807.86
American Medical Education Foundation		9,178.00
President's Office Expense		1,220.99
Woman's Auxiliary		1,224.83
Maternal Welfare Committee		200.00
Committee on Infant and Child Health		115.92
Secretary's Office Expense		250.03
Treasurer's Office Expense		150.00

Committee on Public Relations	\$ 2,517.27	
Legislative Services	646.52	
Conference on Aging	87.96	
Benevolence Fund	550.00	
A. M. A. Dues Remitted	<u>30,625.00</u>	
Total		111,636.31
Excess of Revenue Over Expenses		\$12,797.08

### SOUTH CAROLINA PUBLIC HEALTH ASSOCIATION

38th ANNUAL CONVENTION

May 11 - 13th, 1961

Poinsett Hotel, Greenville, S. C.

Registration: \$2 to SCPIIA members—\$3 to non-members

#### CONVENTION THEME:

"AVENUES OF COMMUNICATION"



# REPORT OF MEMORIAL COMMITTEE

## SOUTH CAROLINA MEDICAL ASSOCIATION

### 1960-1961

We have come here to honor the memory of those friends and colleagues of ours who have passed on to their reward since our meeting a year ago. The following members of the South Carolina Medical Association have died within the past twelve months.

They found that "happiness lies in the absorption of some vocation which satisfies the soul; that we are here to add what we can *to*, not to get what we can *from* life."

To quote further from Sir William Osler: "You have been much by the dark river — so near to us all — and have seen so many embark that the dread of the old boatman has almost disappeared, and

When the Angel of the darker Drink  
At last shall find you by the river brink,  
And offering his cup, invite your soul  
Forth to your lips to quaff — you shall not shrink:

your passport shall be the blessing of Him in whose footsteps you have trodden, unto whose sick you have ministered, and for whose children you have cared."

Submitted by the Memorial Committee  
M. R. Mobley, Chairman  
Harold S. Gilmore  
Hugh P. Smith

RUSKIN G. ANDERSON	Spartanburg	December 30, 1960
WILLIAM R. BARRON	Columbia	August 5, 1960
JAMES I. BEDENBAUGH	Prosperity	1960
JOSEPH HENRY CANNON	Charleston	May 22, 1960
JOHN R. CLAUSSEN	Florence	December 19, 1960
THEODORE M. DuBOSE	Columbia	November 23, 1960
AMOS C. ESTES	Winnsboro	December 8, 1960
EVERETTE E. HERLONG	Rock Hill	August 6, 1960
LESLIE St. CLAIR HAYS	Clinton	December 28, 1960
JOHN WILLIAM JACKSON	Anderson	February 5, 1961
E. T. KELLY	Georgetown	May 16, 1960
JOHN PHILLIP KILLEY	Myrtle Beach	December 11, 1960
McMILLAN KING MAZYCK	Charleston	February 25, 1961
WILLIAM HENRY MONCRIEF (Col. MC, USA, ret.,)	Columbia	January 25, 1961
SAMUEL O. PRUITT	Anderson	August 10, 1960
THOMAS G. SHARPE	Greenville	1961
EDGAR E. STRONG, JR.	York	June 21, 1960
HAROLD B. WEBB	Camden	1960
JOHN A. WERTZ	Estill	January 30, 1961

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# Exhibitors Pages

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## THE WM. S. MERRELL COMPANY

A summary of mounting clinical evidence attesting to the effectiveness of MER/29 in patients with hypercholesterolemia and related conditions will be presented by MERRELL. Update your knowledge of MER/29 by stopping briefly at the MERRELL display. Salesmen will summarize the extensive results of MER/29 therapy for you and answer questions you may have. Best wishes for a most enjoyable convention.

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## THE S. E. MASSENGILL COMPANY

Best wishes from Massengill to the South Carolina Medical Association for a most successful 1961 Convention! Massengill representatives will be honored to discuss any products of interest to you. On display will be TRIMAGILL, the outstanding new product for vaginal therapy; MASSENGILL POWDER, the preferred vaginal douche; ADRENOSEM, the unique systemic hemostat; OBEDRIN, superior reducing aid; HOMAGENETS, the only solid homogenized vitamins; LIVITAMIN, the hematinic of choice and products of the SALCORT-PREDSEM GROUP for the complete range of arthritic therapy. Of course, literature and samples will be available should you desire them.

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## ELI LILLY AND COMPANY

You are cordially invited to visit the Lilly exhibit located in space No. 28. The Lilly sales people in attendance welcome your questions about Lilly products and recent therapeutic developments.

The following Lilly salesmen will be in attendance at our exhibit during the meeting.

Mr. W. S. Holt, R. Ph. (in charge of exhibit)

Mr. J. E. Langford, Jr., R. Ph.

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## WAMPOLE LABORATORIES

*VoSol OTIC SOLUTION*, for the treatment and prevention of Otitis Externa. *VoSol Otic Solution* is bactericidal and fungicidal containing no antibiotics or sulfonamides and causing no sensitization.

*ORGANIDIN*, the unique organically bound iodine useful as a mucolytic and expectorant without the side effects normally seen in conjunction with iodide therapy. In addition to *Organidin Solution* and *Tablets*, samples and literature will be available on *ORGANIDIN ELIXIR* in the new dosage form of *Organidin*.

*RECTALAD ENEMA*, the unique, truly miniature enema useful in triggering the defecatory reflex to stimulate prompt emptying of the lower bowel. Useful pre and post operative, pre and post delivery and in the solution of problems associated with occasional constipation.

*RECTALAD-AMINOPHYLLINE*, which makes available a highly concentrated aqueous solution of aminophylline for immediate and rapid absorption by the rectal mucosa.

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## PFIZER LABORATORIES

You are cordially invited to visit the Pfizer Laboratories booth where our Professional Service Representatives will be pleased to discuss the latest topics of clinical interest.

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## WARREN-TEED PRODUCTS

The Warren-Teed Products Company will feature the following pharmaceutical specialty products at their exhibit.

*Iloalm Tablets*—Antilcerogenic plus anticholinergic management of peptic ulceration.

*Iloamel Powder*—Antilcerogenic plus antacid management of peptic ulceration.

*Ilopan*—An injectable d-pantothenyl alcohol for the treatment and prevention of flatulent gastrointestinal distention.

*Modane*—More than a laxative—for rehabilitation and relief of the atonic bowel.

*Kaon*—An extremely palatable oral potassium.

Warren-Teed representatives cordially welcome all registrants to visit their display.

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## PET MILK COMPANY

We will be pleased to have you stop and discuss the variety of time-saving material available to busy physicians. Our representatives will be on hand to discuss the merits of "Pet" Evaporated Milk for infant feeding and "Pet" INSTANT Nonfat Dry Milk for special diets.

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## THE LANIER COMPANIES GRAY AUDOGRAPH DICTATION SYSTEMS

James McNulty and Richard Bridges of The Lanier Company will be present to demonstrate the Gray Audograph and PhonAudograph Dictation Systems with particular emphasis on medical records. As communications specialists they are well qualified to answer your questions on dictation systems and procedures and welcome you to visit their exhibit.

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## LEDERLE LABORATORIES

Your Lederle representative will be on hand to serve you. He can furnish information on any Lederle product and is prepared to bring to bear on any of your medical problems the knowledge of the worldwide Lederle research organization.

## BREON LABORATORIES INC.

Breon is pleased to present Bronkometer, Bronkospray, Bronkephrine, Bronkotabs and Bronkotab Elixir for the prophylactic and therapeutic management of bronchial asthma; Diaparene preparations for the prevention and treatment of ammonia dermatitis; Lan-teen products for more reliable family planning and American Ferment preparations Caroid & Bile Salts Tablets and Al-caroid Antacid.

## MEAD JOHNSON LABORATORIES

The Mead Johnson Laboratories' exhibit has been arranged to give you the optimum in quick service and product information. To make your visit productive, specially trained representatives will be on duty to tell you about their products.

## WM. P. POYTHRESS & CO.

D. N. Patterson extends a cordial welcome from the Poythress exhibit booth. Synirin, effective new analgesic; Mudrane, outstanding antiasthmatic; and Solfoscipine, effectively balanced hypotensive-sedative, will be featured—as well as the traditional Poythress products Solfoton, Panalgescic and Tro-inate. Your requests for professional trial quantities and descriptive literature are sincerely invited.

## A. H. ROBINS COMPANY, INC. Richmond, Virginia

Ask the Robins representatives about DIMETANE,

the antihistamine with unsurpassed potency and placebo-like side effects, and ENTOZYME and DON-NAZYME, the digestants proved especially suitable for your gallbladder or "nervous indigestion" patients, respectively. They will also be happy to discuss time-tested DONNATAL (antispasmodic-sedative) and ALLBEE WITH C (high potency B and C vitamins) or other Robins products.

## COLUMBIA BRACE SHOP

Columbia, S. C.

We will have on display at the South Carolina Medical Association, April 25th, 26th and 27th, corrective shoes, orthopedic braces and appliances.

## THE STUART COMPANY

A cordial invitation is extended to all members and guests attending this meeting to visit the Stuart Company booth. Specially trained representatives will be in attendance to answer your questions on new products developed in our new and modern laboratories which have received international acclaim.

## G. D. SEARLE & CO.

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.

Featured will be our new products, Aldactazide, Lomotil, and Enovid.

## PLAQUE HONORS DR. T. H. MARTIN

A bronze plaque honoring Dr. T. Hutson Martin was presented at dedication ceremonies of the new Charleston County Health Center. The plaque was presented by Dr. Joseph I. Waring, a member of the Charleston County Board of Health. It bears the inscription: "Dedicated in honor of T. Hutson Martin, M. D., in recognition of the many years of loyal, faithful and devoted service which he rendered to his community as a member of the Charleston County Board of Health."

At the time of the presentation, Dr. Waring said, "This is the first time a member of the Board of Health has been so honored."

## BENNETTSVILLE MAN WILL GET YOUTH LEADERSHIP AWARD

Dr. Roy A. Howell of Bennettsville has been selected to receive the 1961 Leadership Award, presented by the Catholic Youth Organization of the Diocese of Charleston.

In his profession, Dr. Howell is currently president of the Pee Dee Medical Association. He holds memberships in the Marlboro County, South Carolina, Medical Associations, South Carolina Society of Internal Medicine, American Society of Internal Medicine, the

Osler Society, and the American Heart Association.

He is also president of the Marlboro Heart Association, a diplomate of the American Board of Internal Medicine, and is a member of the Bennettsville Junior Chamber of Commerce.

J. William Pitts, M. D. and Paul Eugene Payne, Jr., M. D. announce their association for the general practice of medicine at 1400 Barnwell Street, Columbia, S. C.

The Frank Hilton McLeod Memorial Scientific Assembly was presented by the staff of the McLeod Infirmary in Florence on March 16. The invited guest of the occasion was Dr. John H. Talbott, editor of *The Journal of the American Medical Association*, who gave a clinical discussion of Gout at the afternoon session and delivered an address on "The editing of a Medical Journal" following the dinner at the Florence Country Club in the evening. Local speakers for the afternoon session included Dr. Henry Rigdon, Dr. W. M. Hart, Dr. A. W. Conerly, Dr. George C. Smith, Dr. N. B. Baroody, Dr. W. G. Baroody; Drs. D. J. Greiner and H. S. Allen presented a clinico-pathological conference.



# News

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The Twentieth Reunion of the Class of 1941 of the Medical College of South Carolina will be held at the Country Club of Charleston, Wednesday evening, April 26th for a cocktail party and dinner.

A. Frank Harrison, III, M. D., announces the removal of his office to Midland Mall, Midland Shopping Center, Two Notch at Covenant Road, Columbia, S. C.

## DOCTOR CHANGES OFFICE LOCATION

Dr. H. C. Batson has opened an office on Cedar Lane Road, Berea, S. C. for general practice of medicine.

His office formerly was at 202 N. Brown St.

Carium Joseph, M. D. announces the opening of his office at 61 Gadsden St., Charleston, S. C. Practice limited to obstetrics and gynecology.

Callis J. Anderson, M. D. announces the opening of his office for the practice of ophthalmology at The Medical Center Building, 4 Catawba Street, Spartanburg, S. C.

Dr. W. E. McCurry, who has practiced general medicine at Ridge Spring for 25 years, has moved to Columbia and opened an office for general practice at 3624 Rosewood Drive.

Dr. McCurry is a graduate of the Medical College of South Carolina, class of 1937.

He previously was graduated from Furman University with a bachelor of arts and bachelor of science degrees and from the University of South Carolina with a masters degree in chemistry. He studied advanced chemistry at the University of Chicago and obstetrics and anesthesia at the University of Tennessee.

Doctor McCurry taught chemistry at the University of Arkansas before attending the medical college. He studied cardiology at Duke University.

Joseph L. Kurtzman, M. D. announces his release from service in the U. S. Navy Medical Corps and the opening of full time practice of ophthalmology at 107 G. Ashley Avenue, Charleston.

The Coastal Medical Society held a meeting on February 16, 1961 at Walterboro. The speaker of the evening was Dr. Joseph P. Cain, president of the South Carolina Medical Association.

Dr. Thomas T. Galt, 33, was picked as Spartanburg's Young Man Of The Year. The anesthesiologist

was selected for the honor by a committee designated by the Spartanburg Junior Chamber of Commerce.

## McCLELLANVILLE NATIVE WINS NAVY CITATION

The Navy Commendation Medal has been awarded Dr. Albert H. Bridgman, a native of McClellanville and now a resident in surgery at Charity Hospital in New Orleans.

The medal was presented "for outstanding performance of duty as officer-in-charge, Hallett Station, Antarctica".

Signed by the Secretary of the Navy, the citation notes that the doctor "under the most arduous conditions performed the first major medical operation at an isolated Antarctic station".

Dr. Bridgman was released from active duty last July and holds the rank of lieutenant in the Naval Reserve.

## MARKOWITZ IS PROMOTED TO COLONEL

Isidor Markowitz, chief of preventive medicine at Fort Jackson's U. S. Army Hospital, has been promoted to colonel. Col. Thomas G. Faison, commanding officer of the hospital, presented Colonel Markowitz's silver eagles to him in an informal ceremony at the hospital.

## DR. J. C. HEDDEN TELLS OF PUBLIC HEALTH PROGRESS

A decade of progress in the realm of public health in Spartanburg County was reviewed by Dr. J. C. Hedden at formal dedication services for Inman's new Medical Center located on Howard Street.

The medical center is the result of years of planning and preparation on the part of the Health Department and the County Delegation. It is the sixth of such centers opened in Spartanburg County in major communities with population concentration.

Dr. Joseph Donald, president of the Southern Surgical Association died recently in Birmingham.

Dr. William H. Prioleau of Charleston, vice president of the association, will preside over the association's annual meeting at Hot Springs, Va., in December.

## SANITARIUM DEDICATION

Private dedicatory services were held at 1 p. m. Saturday, February 11th at the Forest Hills Sanitarium and Nursing Home, 2451 Forest Drive, Columbia.

Dr. C. L. Gnyton, assistant state health officer of South Carolina, spoke on "Progress of the Nursing

Home in South Carolina," and Dr. Weston C. Cook, president of the Columbia Medical Society spoke on "The Relationship of the Nursing Home to the Hospital."

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### U. S. DEPARTMENT OF PUBLIC HEALTH SERVICE

The Public Health Service is now accepting applications for graduate training in public health for the 1961-62 academic year.

Congress established the public health training program in 1956 in recognition of the urgent need to increase the numbers of personnel trained to conduct effective programs in public health agencies. In 1959 the Congress extended the program to operate through June 30, 1964.

More than 2,800 traineeships have been awarded to individuals either directly by the Public Health Service or through grants to public health training institutions. These trainees included 206 physicians, 1,496 nurses, 243 health educators, 262 sanitary engineers, and 176 sanitarians, as well as dentists, laboratory personnel, nutritionists, and others whose skills are needed in modern public health practice.

The awards provide stipends for living expenses of the trainees in addition to tuition and fees. Information and application forms may be obtained from the Division of Community Health Practice, Public Health Service, Washington 25, D. C.

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### DR. JOSEY HEADS INTERNISTS

Dr. A. Izard Josey of Columbia was re-elected president of the South Carolina Society of Internal Medicine at the society's annual meeting in Columbia on February 18.

Officers, in addition to Dr. Josey, were elected as follows: Dr. K. Paul Switzer, vice-president, and Dr. Ralph R. Coleman, secretary-treasurer. Dr. Ben N. Miller was elected as the society's delegate to the convention of the national association of internists.

Members of the South Carolina society's Executive Council were elected as follows: Dr. O. B. Mayer, Dr. Richard Christian, Dr. Charles Holmes and Dr. Robert Wilson.

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Miss Jane Louise Blakely, a member of the junior class of the Medical College of S. C. has been awarded a Smith, Kline and French foreign fellowship. She is scheduled to study and work in Pakistan from September, 1961 to December, 1961. These fellowships are designed to help the American medical student gain valuable clinical experience under the guidance of physicians already practicing in remote areas, and to practice preventive medicine at outpost facilities.

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Dr. W. C. Davison, recently retired Dean of Duke University Medical School, is very much interested in increasing the number of doctors in general practice and particularly throughout the Carolinas. Recently, he requested from Dr. Julian Price a list of locations

in this State where such an opening may exist. The office of the Executive Secretary often has similar inquiries.

At Dr. Price's suggestion and in order to enable him to furnish Dr. Davison with the information requested, members of Council have been asked to look over their Districts and send a list of any locations in need of a general practitioner, either currently or where such a need is expected to develop within the next few months.

At the same time, if there is now or will be soon an opening in one of the specialties, that information is also requested. The material will be handled in conjunction with the office of Dr. Robert Wilson, Secretary of the Association, who is in charge of placement activities.

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### U. S. DEPARTMENT OF PUBLIC HEALTH SERVICE POLIO

Surgeon General Designate Luther L. Terry of the Public Health Service has announced that he has accepted and is putting into immediate operation recommendations made by the Service's Advisory Committee on Poliomyelitis Control for a stepped-up program to prevent polio epidemics in 1961.

The recommendations which concern current use of the Salk polio vaccine and future use of oral polio vaccines were made following a two-day meeting of the Advisory Committee, held late last month at the Service's Communicable Disease Center in Atlanta, Ga.

Dr. Terry has notified members of the Advisory Committee of his acceptance of their recommendations and has forwarded copies to all State and Territorial Health Officers urging their cooperation in encouraging communities to start vaccination drives early.

"I share the sense of urgency expressed by many Committee members on the need for intensive efforts to immunize as many people as possible before this year's polio season," Dr. Terry said. "I call particular attention to the Committee's findings that the recommended dosage schedules may be modified to permit the administration of three shots of Salk vaccine before summer to persons who have not as yet had any vaccine."

In carrying out the program recommended by the Advisory Committee, the Public Health Service has offered assistance in identifying neighborhood groups needing protection against polio and in bringing the attention of medical agencies concerned with polio control, to these non-immune groups. The Service will also support State and local health departments in alerting the public to the need for polio vaccinations through continued cooperation with the Advertising Council's polio vaccination campaign.

A "Babies and Breadwinners" plan to promote vaccination of infants and fathers, particularly in low income areas where the need for vaccination is great-

est, has been developed by the Service and endorsed by the Committee. It will be widely circulated to medical societies, health agencies, PTA's, and other civic groups.

In addition, Dr. Terry said, CDC will emphasize the need for immunizing infants and will encourage behavioral studies in identifying reasons why some people refuse immunization and in methods for overcoming this refusal. The Service will also continue its active liaison with industry to hasten the availability of oral vaccine.

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Dr. Luther L. Terry, Surgeon General Designate of the Public Health Service, has said that the Service is studying all aspects of the influenza epidemics now occurring in Great Britain and Japan.

He said that a Public Health Service physician, stationed in London, is sending frequent reports on the British epidemic to the Service's headquarters in London. Data on the Japanese epidemic is supplied to the Service by the World Health Organization. Also, the Service's Communicable Disease Center in Atlanta is in touch with all State health departments to check for signs of increased incidence in this country.

Thus far, Dr. Terry said, there seems to be no indication that the United States should expect any unusual number of influenza cases.

Although influenza is not one of the diseases that must be reported to the Public Health Service, over half the State health departments at this time last year had indicated that flu was prevalent in their areas. None has done so this year. Another indication that there is no unusual amount of influenza here this year is found in the mortality data which 108 cities routinely report to the Communicable Disease Center each week. Last year, the total flu and pneumonia deaths reported by these 108 cities ranged between 600 and 1,000 deaths a week in January and early February. This year about 500 such deaths have been reported each week. This is well within the limit of what would normally be expected at this time of year.

Asian influenza was the type prevalent here last year and is the type now causing the epidemic in Great Britain. Exposure to cases last year should give most Americans immunity to Asian flu for the next two or three years.

The epidemic in Japan, however, is believed to be caused by the B type influenza virus, which has not been prevalent in this country for about six years. This makes the Japanese epidemic more of a threat than the Great Britain epidemic, Dr. Terry said, although there is presently no cause for alarm.

He said that some people are protected against both types of flu because they have been vaccinated with multivalent vaccine which provides protection against Asian, B and two other types of influenza.

Last fall, Dr. Terry pointed out, the Public Health

Service instituted a campaign to urge private physicians and public health officials to do all they could to see that flu vaccine was given to persons with certain types of diseases (such as cardiac disorders, broncho-pulmonary diseases, diabetes, and Addison's disease); to pregnant women; and to all persons over 65 years of age. In the past, most influenza deaths have occurred among these three groups.

"If the people in these three groups have been vaccinated so that they do not get the disease," Dr. Terry said, "there will be little danger of influenza fatalities even if an epidemic should occur."

Vaccination after an epidemic strikes has little effect, according to Dr. Terry, because every one is exposed to the disease almost simultaneously. He urged that those in the three groups for whom the disease is sometimes fatal get vaccinated now if they did not do so last fall.

According to informal reports from manufacturers of vaccine, there is an adequate supply for continued vaccination of the high risk groups, even though stocks of some individual manufacturers are depleted.

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The Greenville County Selective Service Board is calling nine doctors for physical examinations this month — the first time doctors have been called for physicals there since November of 1958.

Callis J. Anderson, M. D. announces the opening of his office for the practice of ophthalmology at The Medical Center Building, 4 Catawba St., Spartanburg.

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#### DR. CROOKS BACK AFTER SURGERY

Dr. J. H. Crooks, Greenville skin specialist, has returned to his practice at 200 E. North St. after being out for several months because of surgery.

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#### DR. PENNELL TO PRACTICE

The most recent addition to Anderson's medical profession is Dr. James Edgar Pennell, son of Mr. and Mrs. Robert E. Pennell, of Highway 29 South.

Dr. Pennell has hung his shingle out at 1503 North Main St. and begins his practice in Anderson as a general practitioner, with obstetrics and minor surgery.

Dr. Pennell, a native Andersonian, attended the city schools of Anderson and had pre-med work at Clemson College. He entered the military service as a lieutenant in 1951 and served as a planning and training officer at Fort Jackson, and in Japan.

Following his discharge from the service, Dr. Pennell served as instructor in chemistry one year at Clemson, while taking two subjects himself.

In 1955 he entered the Medical College of South Carolina and graduated in 1959. He is a member of the Alpha Kappa Kappa medical fraternity. Following graduation he interned one year at Greenville General Hospital, and had extra medical training as resident physician in the Greenville hospital.



## THE MONTH IN WASHINGTON

Washington, D. C.—The medical profession, the U. S. Public Health Service and the National Foundation are working together in an all-out drive to get as many persons as possible to take Salk vaccine shots before the summer polio season starts.

The Sabin live polio vaccine will not be available in quantity this year.

The Salk vaccine campaign drive is directed particularly at children and younger adults in the lower economic groups.

Dr. Julian P. Price, Florence, S. C., chairman of the American Medical Association's Board of Trustees, pointed out that many children and younger adults in the lower income groups have not been inoculated against polio.

"As long as 'islands of unvaccinated persons' exist even within well-vaccinated communities, polio epidemics remain a serious threat," Dr. Price said.

Dr. Luther L. Terry, Surgeon General of the Public Health Service, emphasized the need for immunizing infants. He also said that the PHS will encourage behavioral studies to determine reasons why some people refuse to take polio shots. It is hoped that then methods may be devised to overcome such refusal.

Dr. Terry called particular attention to the findings of the PHS's Advisory Committee on Poliomyelitis Control that the recommended dosage schedules may be modified to permit the administration of three shots of Salk vaccine before summer to persons who have not had any vaccine before.

Dr. Price stressed that success of the "babies and breadwinners" polio vaccine campaign depends on joint activity at the local level by medical societies, boards of health and voluntary health agencies. He expressed confidence that the more than 2,000 state and county medical societies throughout the country would cooperate wholeheartedly.

"Contrary to recent reports (in Scripps-Howard Newspapers)," Dr. Price said, "the A.M.A. is strongly behind every effort to encourage the public to take advantage of the Salk vaccine without delay."

The Advisory Committee urged that "immediate steps . . . be taken by all interested groups to intensify drives for vaccination with the formalin-inactivated (Salk) vaccine." The Committee also endorsed the plan to direct the campaign particularly at the lower socioeconomic and younger age groups.

The Committee recommended that the first available supplies of the Sabin live, oral vaccine be utilized in the following priority order:—

1. Epidemic control, investigations and community studies.
2. Immunization of infants and pre-school children.
3. Selected area immunization of those segments of the population that are least well immunized.

Congress now has before it legislation to carry out all of President Kennedy's broad health program, but

it is doubtful that the lawmakers will act upon some of it this year.

Kennedy health legislation sent to Congress recently included bills on medical education and federal grants for nursing homes and other community facilities.

The Chief Executive also recommended an expanded program to combat water pollution. He requested Congress to authorize federal grants of \$125 million a year for 10 years to help states forming interstate water pollution control agencies. He also recommended increased federal aid to communities building sewage treatment plants.

The President proposed creation of a special unit in the Public Health Service to handle both air and water pollution matters.

In accompanying letters to the presiding officers of the House and the Senate, Kennedy said he regarded his medical education proposals as the keystone of the overall health program because "we are not presently training enough (physicians) to keep up with our growing population."

The other bill would "make possible a substantial addition to the number of nursing home facilities to care for long-term patients, and . . . help relieve the shortages of home health care programs," Kennedy said.

The medical education measure would authorize federal grants for scholarships for medical and dental students. Each medical and dental school would be eligible for a total of scholarship grants equal to \$1500 times one-fourth of the enrollment after the program had been in effect for four years. The maximum individual scholarship would be \$2,000 a year. Participating schools also would be eligible for federal grants of \$1,000 per scholarship to help pay a school's operating expenses.

The community health facilities bill would increase the annual authorization for federal grants for construction of nonprofit nursing homes from \$10 million to \$20 million and raise the minimum state allotment from \$50,000 to \$100,000 per year. It also would broaden the PHS Surgeon General's authority to conduct research, experiments and demonstrations on development and utilization of hospital services, facilities and resources to include other medical facilities.

Federal grants also would be authorized to help finance studies, experiments and demonstrations by states and other nonfederal agencies for development of new or improved methods of providing health services outside hospitals, particularly for chronically ill or aged persons.

The A. M. A. found "much to applaud" in Kennedy's overall health program, but stood fast in opposing the proposal to provide elderly persons with health care through the social security system. Dr. F. J. L. Blasingame, executive vice president of the A. M. A., said:

"We support the broad principles and the general



## MILD—MODERATE—SEVERE GASTROINTESTINAL DISORDERS

# Pro-Banthine®

Brand of propantheline bromide

TABLETS  
AMPULS

One characteristic of Pro-Banthine which has won it general medical acceptance is its versatility. Pro-Banthine has proved highly useful in the management of gastrointestinal disorders varying widely in both symptoms and severity.

In peptic ulcer and in other disorders characterized by hyperacidity, hypermotility or spasm of the enteric tract, Pro-Banthine controls symptoms with a consistency attested in more than 375 published reports.

This therapeutic proficiency results not merely from the high level of pharmacodynamic activity of Pro-Banthine but also from a favorable balance of its actions on both autonomic ganglia and parasympathetic effector organs. The total effect of this activity permits doubling or tripling the usual dosage to relieve severe or intractable conditions without unduly extending or aggravating secondary actions.

Less than a satisfactory response<sup>1</sup> to Pro-Banthine may often be simply a result of less than adequate dosage.

Pro-Banthine, brand of propantheline bromide, is supplied in tablets of 15 mg. for oral administration in conditions such as peptic ulcer, gastritis, duodenitis, pylorospasm, biliary dyskinesia and spastic colon, and in ampuls of 30 mg. for intramuscular or intravenous administration in conditions such as ureteral spasm and pancreatitis in which prompt and vigorous effects are required or when nausea and vomiting preclude oral administration.

*Usual adult dosage:* One tablet four times daily. Up to four tablets may be administered four times daily for severe manifestations.

*When emotional factors prevail —*

**PRO-BANTHINE® with DARTAL®**

Brand of propantheline bromide with thiopropazate dihydrochloride  
(Not more than four tablets daily.)

OR

**PRO-BANTHINE® with Phenobarbital**

1. Krantz, J. C., Jr., and Carr, C. J.: *The Pharmacologic Principles of Medical Practice*, Baltimore, The Williams & Wilkins Company, 1958, p. 843.

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goals of the President's program, but we cannot support his proposal for hospitalization and nursing care for persons over 65 under social security.

"In fact, after studying this section of the President's plan, the A. M. A. more strongly than ever reaffirms its support of the Kerr-Mills law."

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# Deaths

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## DR. G. F. HUGHSTON

Dr. George Franklin Hughston, 72, of Fairforest, died at his home after a short illness.

He was a native of Spartanburg County and practiced medicine in Spartanburg for 44 years and was a member and former deacon of Bethlehem Baptist Church of Roebuck. A member of Arcadia Masonic Lodge 285, the American Medical Association, and the Spartanburg County Medical Society. He was a graduate of Wofford College, class of 1911, and the Medical College of Virginia in 1916.

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## DR. L. S. FULLER

Dr. Lawrence Stokes Fuller of 21 Heathwood Circle, died at his home February 23.

Dr. Fuller was born in Laurens a son of the late Ada Holmes and Dr. L. S. Fuller.

He graduated from the University of South Carolina, received his M. D. degree from the John Hopkins Medical School, and also an M. D. degree from the University of Paris School of Medicine.

He served as chief of staff at the American Hospital of Paris until 1940. He then served in the U. S. Army overseas with the rank of Colonel. He was decorated with the Legion of Honor by the French Government.

He retired from practice after World War II and made his home in Columbia.

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## DR. M. K. MAZYCK

Dr. McMillan King Mazyck of 23 Chalmers St., a

retired physician, died February 25 at a local hospital. He was 83 years of age.

A native of Greenville, Dr. Mazyck was born November 22, 1877. He attended local schools and was graduated from the College of Charleston and the Medical College of S. C.

At one time, Dr. Mazyck was associated with the old Roper Hospital clinic. He was a member of Landmark Lodge No. 76, AFM; the Medical Society of S. C. and the S. C. Medical Association.

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## DR. J. W. JACKSON

Dr. John William Jackson, Jr., widely-known young Anderson physician, died in Piedmont Hospital in Atlanta.

Dr. Jackson, who was 30, had been in failing health for some time and had been seriously ill for a month. He was a patient at Anderson Hospital several weeks and was later admitted to the Atlanta hospital.

Dr. Jackson was born in Reidsville, Ga., and was a graduate of the University of Georgia.

He attended the University of Tennessee at Knoxville, where he was graduated from Medical School, and was a member of the AOA Honorary Medical Society. He was graduated at the head of his class. Upon his graduation from the medical school he did his internship at the John Gaston Memorial Hospital in Memphis, Tenn. Upon the completion of his internship he moved to Anderson four years ago and since that time has practiced medicine there.

Dr. Jackson's honorary escort was composed of members of the Anderson County Medical Society.

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## MEDICAL COLLEGE CIRCUIT COURSES

Two additional Circuit Course presentations have been scheduled for the spring quarter, one in Sumter, South Carolina on April 20th at 6 P. M. and another on May 31st at Orangeburg, South Carolina from 6 to 10 P. M.

Faculty for the Sumter Symposium on "Lymphomas" is: Dr. J. C. Hawk, Associate Professor of Surgery, Dr. H. S. Pettit, Professor of Radiology, Dr. Charlton deSaussure, Assistant Professor of Medicine, and Dr. Dale Groom, Assistant Professor of Medicine as Moderator. It will be held at Frank's Restaurant

and those planning to attend are requested to notify Dr. C. R. F. Baker, 10 West Calhoun Street, Sumter, South Carolina.

Faculty for the Orangeburg Symposium on "Thyroid Diseases—Diagnosis and Treatment" is: Dr. R. R. Bradham, Assistant Professor of Surgery, Dr. John Buse, Assistant Professor of Medicine, Dr. Maria Buse, Instructor in Chemistry and Dr. Cheves Smythe, Assistant Professor of Medicine as Moderator. The symposium will be held at Berry's on the Hill restaurant.



## ADVERTISERS

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American Medical Association .....	42-A	Parke, Davis & Company .....	34-A, 35-A, 56-A, 57-A
Ames Company, Inc. ....	8-A	Physicians Casualty Assn. ....	30-A
Appalachian Hall .....	31-A	Physicians Products Company .....	14-A
Blue Shield .....	29-A	Pinebluff Sanitarium .....	3-A
Brawners Sanitarium .....	46-A	A. H. Robins Company .....	11-A, 12-A, 13-A, 26-A
Bristol Laboratories .....	37, 38, 39, 40-A	J. B. Roerig & Company .....	7-A
Burroughs Wellcome & Company .....	17-A	Sardeau, Inc. ....	43-A
Charles C. Haskell .....	16-A	W. B. Saunders .....	15-A
The Coca-Cola Company .....	46-A	Schering Corporation .....	19-A
Davies, Rose & Company .....	52-A	Sealy, Inc. ....	32-A
Drug Specialties, Inc. ....	36-A	G. D. Searle & Company .....	205
Eli Lilly & Company .....	1-A, 20-A	E. R. Squibb & Sons .....	48-A, 49-A, 53-A
Emko Company .....	54-A, 55-A	St. Paul Insurance Company .....	21-A
Estes Surgical Supply Company .....	30-A	U. S. Brewers Foundation .....	9-A
Florida Citrus Commission .....	51-A	Upjohn Company .....	22-A, 23-A
George A. Breon & Company .....	50-A	Wallace Laboratories .....	10-A, 41-A, 44-A, 45-A
Highland Hospital .....	33-A	Waverly Sanitarium .....	46-A
Jones & Vaughan .....	4-A	Wesson Oil .....	24-A, 25-A
Lederle Laboratories .....	18-A, 21-A, 28, 29, 31-A	Westbrook Sanitorium .....	33-A
Malthie Laboratories .....	30-A, 32-A	Winchester Surgical Supply .....	207
Mayrand, Inc. ....	6-A	Winthrop Laboratories .....	2-A
		World Insurance Company .....	47-A

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## SEVEN GRANTS GIVEN COLLEGE TOTAL \$72,641

During the month of December, seven grants totaling \$72,961 were given to the Medical College.

The National Institutes of Health, which represent such agencies as the heart and cancer institutes, were responsible for the four following grants:

1. A grant of \$7,935 to Dr. Peter C. Gazes; Department of pharmacology and medicine, for research in "Warfarin vs. Heparin in Acute Myocardial Infarction." (Dec. 1, 1960-Nov. 30, 1961).

2. For continuation in his study of "Measurement of Changes in Heart Contractile Force," Dr. R. P. Walton, department of pharmacology, was granted \$17,098. (Sept. 1, 1961—August 31, 1962).

3. A grant of \$21,448 to Dr. Robert F. Hagerty, department of surgery, for continuation of his research in "Facial Growth and Dentition in Cleft Palate Subjects." (Jan. 1, 1961—Dec. 31, 1961.)

4. To Dr. Isabel Lockard, department of anatomy, a grant of \$15,335 for research in "Capillary Patterns in the Central Nervous System." (Jan. 1, 1961—Dec. 31, 1961.)

Tobacco Industry Research has granted \$7,245 to Dr. L. L. Hester, Jr., department of obstetrics and gynecology, for continuation of his work in "Relationship on the Use of Tobacco Products to the Outcome of pregnancy." (Jan. 1, 1961—Dec. 31, 1961.)

United Health and Medical Research Foundation of South Carolina has made grants to Mr. Robert L. McDonald, department of psychiatry, for his work in "Personal and Interpersonal Factors in Parents of Schizophrenic Children, Personality Factors in Marriage: a preliminary study" (\$1,550), and to Dr. R. R. Bradham, department of surgery for continuation in the study of "Inhibition and Dissolution of Arterial and Venous Thrombi Produced in Laboratory Animals and Occurring in Thrombotic Disease in Men." (\$2,350 for the period Feb. 1961-Feb. 1962.)

## FELLOWSHIPS IN MATERNAL AND CHILD HEALTH

Harvard School of Public Health  
Maternal and Child Health Department  
Boston, Massachusetts

The Department of Maternal and Child Health of the Harvard School of Public Health announces two Fellowships for the year 1961-1962 for physicians who have completed in full or in part the residency requirements for certification by the American Board of Obstetrics and Gynecology.

The one-year program leads to the degree of Master of Public Health and is one of the requirements for certification by the American Board of Preventive Medicine. The Fellowships may be extended for a second year for those who wish to undertake research and who meet the qualifications. Such research, if appropriate, may serve to fulfill the re-

quirements, in part, for a doctoral degree in public health.

The Fellowships cover tuition and fees, an allowance for travel, and a monthly stipend of \$400 plus \$30 a month for each dependent during the period of study.

Inquiries should be sent to Dr. William M. Schmidt, Professor of Maternal and Child Health, Harvard School of Public Health, 55 Shattuck Street, Boston 15, Massachusetts, preferably before April 1, 1961.

January 1961



*One of two walls of books in the Bookstore.*

On January 8th, the Bookstore of the Medical College of South Carolina observed its second birthday. In its two years of operation, the Bookstore has enjoyed an ever growing popularity among the school's faculty and students, as evidenced by their steadily increasing patronage of this, one of the Medical College's newer facilities.

Although established primarily to serve the needs of the staff and student body at the Medical College, the Bookstore also extends its services to physicians of the surrounding community and to those from other areas who may be visiting in Charleston. Its shelves display, in addition to a large inventory of standard medical texts, an extensive assortment of advanced titles in the various fields of clinical medicine and the basic sciences. As the only facility of its kind in the state, the Medical Bookstore offers a unique opportunity for the physician to browse through a wide selection of the most recently published medical books.

A CHARLESTON doctor who has to be absolutely and positively sure before he will operate for appendicitis — and even then sometimes is reluctant — is known by his colleagues as the Abdominal No-man. Well, if he isn't, he ought to be.

# The Journal

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## South Carolina Medical Association

VOLUME 57

May, 1961

NUMBER 5

### GANGRENOUS CHOLECYSTITIS AFTER PROSTATECTOMY OR OTHER UNRELATED SURGERY AND UNRELATED TRAUMA

#### A PROPOSED SYNDROME

KENNETH M. LYNCH, JR., M. D.  
*Professor of Urology, Medical College of S. C.  
Charleston, S. C.*

#### *Introduction*

The reduction in mortality following prostatectomy over the last fifteen years from an acceptable 2.5% on private patients and 6% on service patients, to an over-all mortality rate less than 1% is due in large part to (1) routine medical consultation, particularly in regard to the cardiac and pulmonary status of the patient, (2) the anesthesiologist, (3) antibiotics, (4) adequate blood replacement, and (5) the selection of the safest type of prostatectomy for each individual patient. To further reduce the involved risk to a negligible percentage will involve an awareness of rare complications which may be fatal if not recognized and treated appropriately. One such complication is acute gangrenous cholecystitis which may follow prostatectomy or other unrelated surgery and trauma.

The author was unaware of this possible complication until he encountered it following a suprapubic prostatectomy in 1954. He was subsequently associated with a similar case following fracture of the lower extremity in 1956, and discovered a third case in our hos-

pital which followed laryngectomy in 1958. Both patients in whom the cholecystitis followed operations had emergency cholecystectomy and recovered; that following trauma was not diagnosed and the outcome was fatal.

A search of the literature discovered a report in 1956 by Levin<sup>1</sup> of four similar cases, two of which followed suprapubic prostatectomy and all of which resulted in the death of the patient. Since Levin was able to find 40 reported cases of acute gangrenous cholecystitis, and since three additional cases were reported in 1957 by Beck and his associates,<sup>2</sup> we felt that a report of our three cases and an analysis of the symptomatology, pathogenesis and possible etiology would be justified in that it might alert surgeons to awareness of this insidious and often fatal complication of unrelated operations and trauma.

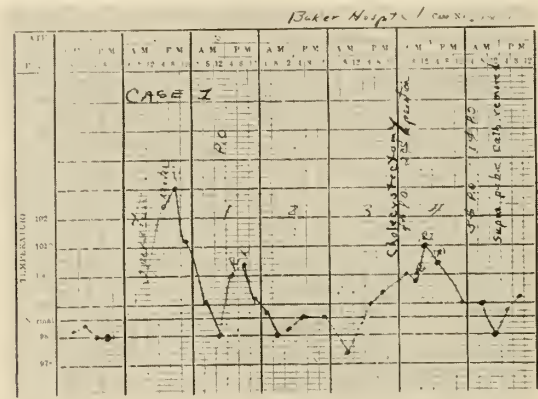
#### *Case Reports*

*Case 1:* M. G., Baker Memorial Hospital, No. 61571, a 65 year old moderately obese diabetic Jewish male, was admitted to the hospital on May 24, 1954 because of gross hematuria and difficulty of urination due to hyperplasia of the prostate. Because of vague right upper quadrant tenderness, a cholecystogram was obtained and showed a normally functioning gallbladder with no evidence of cholelithiasis; his history was negative for biliary symptoms. Suprapubic pros-

Read at the Annual Meeting of the S. C. Chapter of the American College of Surgeons, Greenville, South Carolina, November 3, 1960.



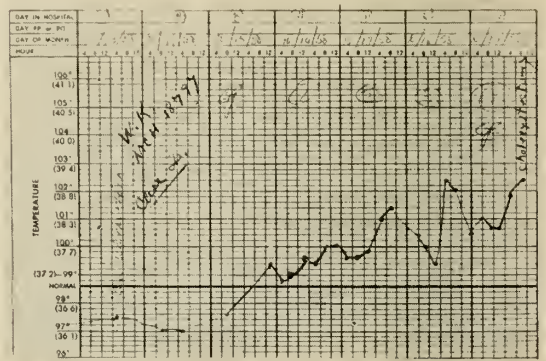
tactectomy was performed on June 4. His postoperative febrile response subsided to normal on the second day, (Figure 1) and he had only the usual complaints



following prostatectomy. Late in the afternoon of June 7, the third postoperative day, he complained of epigastric pain which became so severe that medical consultation was requested at 9:30 P. M., acute myocardial infarction being entertained as a possibility. He was a little nauseated but did not vomit. The white blood count was 18,300 and his temperature was 99.4. There was marked tenderness in both upper quadrants of the abdomen, but especially of the right. There was no audible peristalsis. It was the opinion of the medical consultant that he had acute peritonitis, possibly chemical, due to the escape of urine into the peritoneal cavity. The surgical consultant, who was called to see the patient at 10:30 P. M. agreed that the patient had an acute abdominal condition and felt that a perforated gastric ulcer was the most likely diagnosis, with acute pancreatitis the second possibility. Laparotomy was performed at 11:15 P. M. and a small amount of purulent fluid containing bile was evacuated from the upper abdomen. The omentum was loosely adherent to the gallbladder which was tremendously distended and firm. The wall of the gallbladder was edematous and friable, and tore easily when touched; it contained a large amount of dark cloudy bile and three small stones. The common duct and pancreas were normal. Microscopic sections of the gallbladder wall showed acute inflammatory reaction. The patient's course following cholecystectomy was uneventful. He was discharged from the hospital 14 days following the prostatectomy and 10 days following cholecystectomy.

Case 2: W. K., Medical College Hospital, No. 18797, a 69 year old moderately obese Caucasian male, was admitted to the hospital on October 13, 1958 because of epidermoid carcinoma of the larynx. His medical history was specifically negative for biliary symptoms, but an upper gastro-intestinal x-ray series had been performed some years previously for abdominal pain. Total laryngectomy and tracheostomy was performed on October 15. His abdomen was described as being soft in the immediate post-operative period. On the

morning of October 19, the fourth post-operative day, he complained of epigastric pain after a fatty meal given by a gastric tube, and later in the day of right upper quadrant pain. Tenderness was noted in the right upper quadrant and a questionable mass was described in this location. There was rebound tenderness referred to the right lower quadrant and the resident entered the observation that the patient "might have cholecystitis". The white blood count was 16,050/cu. mm. An x-ray film of the abdomen showed no opaque gallstones. His fever had gradually climbed following laryngectomy and was 101.2° F. (Figure 2).



The attending surgeon felt that the patient had either acute cholecystitis or acute appendicitis and laparotomy was performed at 8:15 P. M. There was an estimated 200 ml. of green-stained fluid in the peritoneal cavity in the gallbladder area. The gallbladder was greatly distended, thin walled, and there was "early gangrene". It contained numerous dark, pigmented stones varying from 3 to 6 mm. The common duct was thin walled and contained no stones. A bacteriological culture of the gallbladder was negative. Pathologic examination showed acute inflammatory reaction. His course following cholecystectomy was uneventful and he was discharged on the sixteenth post-operative day. Case 3: T. B., Roper Hospital, No. A-54211, a 65 year old moderately obese Caucasian male, was admitted to the hospital on March 4, 1956 with fractures of the left tibia and fibula, after having been struck by an automobile. It was recorded that he had always been in good health but the absence of biliary symptoms was not specifically mentioned. The abdomen was negative on the admission examination. Soon after the application of a long leg cast, he complained of lower abdominal pain and was found to have a distended bladder due to prostatic hyperplasia. After insertion of an indwelling urethral catheter, which obtained 650 ml. of urine showing microscopic hematuria, it was noted that he showed no signs of abdominal injury. During the following 24 hours, he developed increasing abdominal distention. The referring family physician made the observation that he had been treated in the past for alcoholic gastritis and, since he was intoxicated on admission, it was felt that his abdominal findings might be attributed to this. Dur-

ing the second day he developed vague abdominal pain, fever of 102.4° F., and tenderness in the right flank which caused the medical consultant to raise the possibility of right renal contusion. Late in the second day, his blood pressure fell from his normal hypertensive level to 130 mm. Hg. systolic, vomiting ensued, and his urinary output fell significantly. The urological consultant suggested the possibility of renal infarction due to fat emboli from the leg fractures. He was seen by a surgical consultant on the third day who made no comment regarding a diagnosis until the seventh day when he commented that he believed that the abdominal distention was due to aerophagia. The medical consultant observed that he agreed with this opinion since the patient felt better and since he had been afebrile for several days. The patient's temperature rose again on the ninth day and on the tenth day the surgical consultant noted that this was probably due to pulmonary atelectasis since the abdomen was flat and not tender. The fever subsided on tracheal aspirations for several days and then spiked to 104.6° F. on the 14th day. The abdomen again became distended and vomiting ensued and was accompanied by diarrhea. The fever was sustained the following day and the surgical consultant raised the possibility of abdominal exploration for possible partial intestinal obstruction, even though an x-ray film of the abdomen was interpreted as showing only ileus, if his pneumonia could be brought under control. Despite adequate antibiotic therapy and fluid and electrolyte regulation by the medical consultant, the patient died on the morning of the 16th day. Since he had a gradually climbing blood urea nitrogen to uremic levels, the clinical cause of death was recorded as pneumonia, renal infarction due to fat emboli, and paralytic ileus due to undetermined cause. Necropsy discovered what was macroscopically a gangrenous cholecystitis with perforation and abscess, although microscopic examination of the gallbladder showed only autolytic changes throughout the wall with no evidence of inflammation. There was also acute suppurative lobular pneumonia, acute infarcts of the liver and spleen, acute focal pancreatitis, and a Richter's hernia with perforation and abscess; the kidneys showed only arterio- and arteriolonephrosclerosis.

### Discussion

In an analysis of 345 consecutive patients treated for acute cholecystitis, McCubbery and Thiem<sup>3</sup> in 1960 observed that free perforation of the gallbladder very rarely occurs as a fatal complication of known cholecystitis and that it usually occurs as an abdominal catastrophe; they concluded that there are no signs and symptoms typical of perforation of the gallbladder. In a similar analysis of 1,060 patients with acute cholecystitis, Becker, Powell and Turner<sup>2</sup> observed in 1957 that three of their patients died on the medical service of un-

suspected cholecystitis with perforation and generalized bile peritonitis proven by necropsy, and that a similar situation obtained in *three others whose acute cholecystitis developed while they were convalescing from unrelated operations.*

Massie, Coxe, Parker and Dietrick<sup>4</sup> analyzed a series of 1,253 consecutive gallbladder operations in 1957 and found perforations in 1.44 per cent. They felt that perforation is the end result of acute cholecystitis and that the causes are (1) cystic duct obstruction, (2) the presence of concentrated bile in the gallbladder, and (3) infection. They concluded that infection plays only a secondary role since Andrews and Henry<sup>5</sup> had demonstrated in 1953 that qualitatively and quantitatively there was little difference in the cultures of acutely inflamed and microscopically normal gallbladders. Massie and his associates further observed that the pathologic change in the gallbladder in acute cholecystitis consists of thickening and increased opacity of the wall, vascular engorgement, thrombosis, edema, ulceration, suppuration, and local and diffuse gangrene. They commented that this gangrene is seen with a patent cystic artery, which differs from gangrene of other organs in that arterial obstruction is the usual cause.

This observation of Massie and his associates gives support to the work of Womack and Bricker<sup>6</sup> in 1952 which indicated that the cause of the gangrene of the gallbladder is *trauma from concentrated bile* rather than arterial insufficiency. They demonstrated that concentrated bile is chemically irritating. They noted that complete obstruction of the cystic duct does not produce inflammation of the gallbladder if the entrapped bile is replaced with normal saline. They demonstrated that complete obstruction of the duct with the bile left imprisoned in the gallbladder produces inflammation similar to that found in acute cholecystitis, and that the most concentrated bile produced the most severe inflammation.

In reporting his four cases in 1956, Levin<sup>1</sup> remarked that "it is little appreciated that acute cholecystitis may occur as a serious complication after surgery for unrelated disease". His review of the literature included 17 cases

reported by Glenn<sup>7</sup> in 1947, 6 cases reported by Sparkman<sup>8</sup> in 1952 and 17 cases reported by Schwegman and DeMuth<sup>9</sup> in 1953. Of these cases 75 per cent were males and 75 per cent had stones. The onset of symptoms ranged from one to 22 days following operation, being less than 10 days in most. Little or no mention is made of possible previous gallbladder disease. Of the four fatal cases reported by Levin, one developed symptoms 7 days following ileocolic resection, one developed symptoms 4 days and one day respectively following multiple eye surgery, and two followed two stage suprapubic prostatectomy by 33 and 6 days,

Conclusions

Our three cases, added to the 47 cases previously reported in the literature between 1947 and 1957, support a postulated and *proposed syndrome* (Figure 3) of acute cholecystitis, usually resulting in gangrene and perforation, in elderly obese males with previously silent non-opaque gallstones, occurring after unrelated surgery with particular reference to suprapubic prostatectomy, usually prior to the tenth day.

The *suggested etiology* is that of chemically irritating concentrated bile, collected in the gallbladder during the period of pre-operative

FIGURE 3

Case No.	Age	Sex	Operation	Day Symptoms Developed	Obesity	Stones	Died
1 Levin	61	M	Two Stage Prostatectomy	23 and 6	Very	No	Yes
2 Levin	73	M	Two Stage Eye Surgery	4 and 1	Moderately	No	Yes
3 Levin	76	M	Two Stage Prostatectomy	9 and 2	Moderately	No	Yes
4 Levin	67	F	Ileocolic	7	Slightly	Yes	Yes
5 Lvnch	65	M	One Stage Prostatectomy	4	Moderately	Yes	No
6 Lvnch	69	M	Laryngectomy	4	Moderately	Yes	No
7 Lvnch	65	M	Fracture Lower Extremity	2	Moderately	No	Yes

and by 9 and 2 days.

Glenn postulated in 1947 that bile is concentrated in the gallbladder during the fasting period associated with most surgical procedures and that when oral feedings are resumed, the gallbladder contracts in response and a stone or viscid bile may be forced into the cystic duct.

and post-operative fasting, trapped within the gallbladder when its contraction, caused by the re-institution of food in the stomach, causes the occlusion of the cystic duct by a previously silent stone or inspissated bile.

The *presenting symptoms* (Figure 4) although vague and difficult to evaluate because of the unrelated previous surgery, are

FIGURE 4

Case No.	Shock	Fever	Distention	Vomiting	Epigastric or Abdominal Pain	WBC	Abdominal Tenderness
1. Levin	Yes	Yes				14,000	
2. Levin		Yes	Yes	Yes		11,400	
3. Levin	Yes	Yes	Yes			49,100	
4. Levin		Yes	Yes				
5. Lynch	No	99.4	Yes	Nausea	Yes	18,300	Yes
6. Lynch	No	101.2	Yes	No	Yes	16,050	Yes
7. Lynch	Yes	102.4	Yes	Yes	Yes	12,850	Yes



(1) fever, (2) usually abdominal distention with nausea and possibly vomiting, (3) occasionally shock, and (4) in our experience, epigastric pain which may become generalized abdominal pain. The only signs are (1) leukocytosis from 11,400 to 49,000 (our two salvaged patients had counts of 18,300 and 16,050) and (2) abdominal tenderness which is not always in the gallbladder area.

#### Comments

A negative medical history for biliary symptoms and a normal cholecystogram prior to the unrelated surgery does not rule out the possibility of this post-operative syndrome. Palpation of a normal gallbladder at the time of the unrelated surgery does not contra-

indicate the entertainment of a diagnosis of acute cholecystitis in the post-operative period. Acute cholecystitis should be kept in mind as a possibility during the post operative period in patients falling into the category proposed above, namely the obese elderly male with unexpected fever, abdominal distention, nausea, epigastric or generalized abdominal pain, leukocytosis and vague unlocalized abdominal tenderness during the ten day period following any surgical procedure, after a satisfactory early post-operative course. Post-operative complaints should not be accepted as routine sequelae of recently performed surgery.

I wish to thank Dr. John Hawk for permission to report Case 2 and Drs. Arthur V. Williams and Louie B. Jenkins to use Case 3.

#### REFERENCES

1. Levin, J. F.: Death due to gangrenous cholecystitis and peritonitis following unrelated surgery. *J.A.M.A.* 160:1040, 1956.
2. Becker, W. F., Powell, J. L., and Turner, R. J.: A clinical study of 1,060 patients with acute cholecystitis. *Surg. Gynec. & Obst.* 104:491, 1957.
3. McCubrey, D., and Thieme, E. T.: Perforation of the gallbladder. *A.M.A. Arch. Surg.* 80:204, 1960.
4. Massie, J. R., Jr., Cox, J. W., III, Parker, C. and Dietrick, R.: Gallbladder perforations in acute cholecystitis. *Ann. Surg.* 145:825, 1957.
5. Andrews, E. and Henry, L. D.: Bacteriology of normal and diseased gallbladders. *Arch. Int. Med.* 56:1171, 1935.
6. Womack, N. A. and Bricker, E. M.: Pathogenesis of cholecystitis. *Arch. Surg.* 44:658, 1942.
7. Glenn, F.: Acute cholecystitis following the surgical treatment of unrelated disease. *Ann. Surg.* 126:411, 1947.
8. Sparkman, R. S.: Abdominal emergencies following unrelated surgical procedures. *Ann. Surg.* 135:863, 1952.
9. Schwegman, C. W. and DeMuth, W. E., Jr.: Acute cholecystitis following operation for unrelated disease. *Surg. Gynec. & Obst.* 97:167, 1953.

# IDIOPATHIC HYPERCALCEMIA

WILLIAM WESTON, JR.

E. KENNETH AYCOCK

Columbia, S. C.

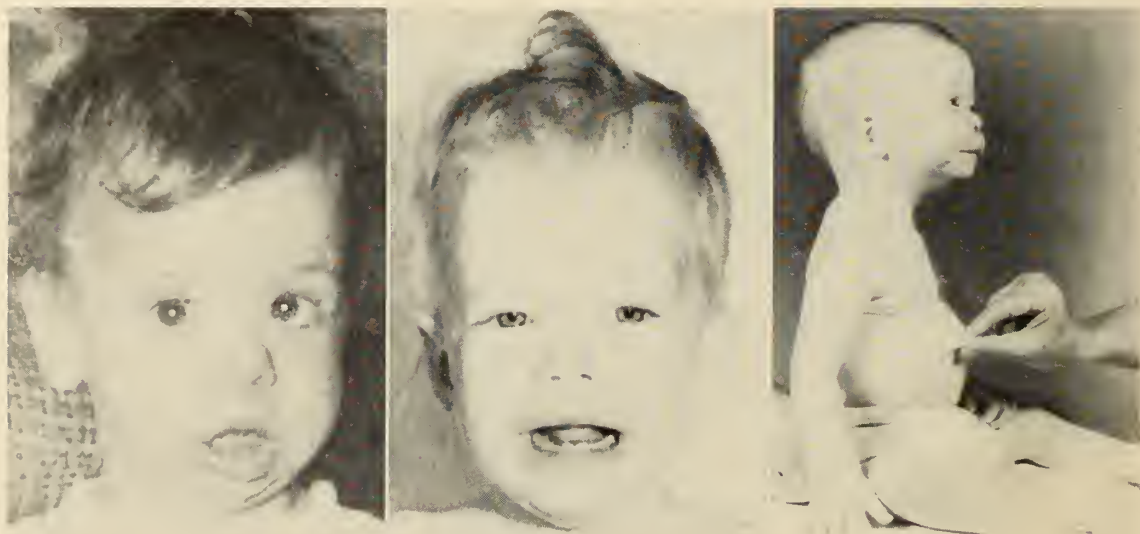
**H**ypercalcemia is probably much more common than reported, and probably because it is not considered and remains unrecognized. Idiopathic hypercalcemia was first described by Lightwood in England in 1952.<sup>1</sup> There are some places in England and Scotland where more than 5% of the hospital admissions between the ages of 6 to 12 months consist of patients with hypercalcemia. This figure is exceeded only by respiratory infections, feeding problems and otitis media. The characteristic appearance of the infant in addition to the slow development should give some clue as to the fault at hand.

Case 1.—A white female, the third sibling of a normal family, (birth weight, 5 pounds, 5 ounces), was first seen at three months. The child had a rash attributed to vitamins, as when the vitamin supply was discontinued the rash cleared. There was a very large umbilical hernia present. The patient had a wild stare

and looked like an elf. She had always been extremely irritable, active, and frightened. The patient was placed on a hypocalcemic diet.

The child developed convulsions on January 12, 1958. Spinal fluid examination was negative. On January 14, the blood calcium was 14.7; Urea Nitrogen 18.9; Urea 40.4; Hgb. 14.6 grams (93.5%). The blood calcium on February 25, was 12.1, phosphorus 4.8. In May, the blood calcium was 9.4, phosphorus 4.8. Case 2—A white female aged 2 years and 3 months, was the second sibling of a family with no abnormalities pertaining to offspring. She was a full term, normal infant, weighing 7 pounds, 10 ounces at birth. At one month she had allergic rhinitis and eczema. She had been getting orange juice voluntarily and not by advice. She had diarrhea, not severe, in December 1959. Development was within normal range but she was slow in sitting up (seven months). Her anterior fontanelle closed at fifteen months. She had impetigo at 17 months. She was put on lactic acid milk with cereal as she was spitting up. In March 1960, at the age of 23 months, she showed pink hands and feet and was readily irritable. There was some thought of acrodynia but the child's whole appearance was suggestive of the elf-like facies characteristic of hypercalcemia. There was a systolic heart murmur not con-

Read at the Annual Meeting of the South Carolina Pediatric Society, Columbia, S. C., September 13, 1960.



*These photographs are all of children with idiopathic hypercalcemia, though none of them is described in this paper. The left and center pictures are of two patients described by O'Brien, Peppers and Silver (J.A.M.A. 173:1106, 1960) and used by their kind permission. The picture on the right is that of a patient of Dr. J. R. Paul, Jr., who has kindly allowed us to use it. The child shown was aged 11 months and had congenital heart disease. His serum calcium was 15.5 mg/100 ml., serum phosphorus 3.6. A second test showed calcium 14.3 mg. phosphorus 4 mg. and reduction to 10.2 mg. of calcium after treatment.*

sidered to be of serious import. Her blood calcium was 11.7 mg. She was placed on a hypocalcemic diet.

*Outstanding Criteria of Hypercalcemia*

- 1. Mental Retardation<sup>2</sup>
- 2. Hypotonia
- 3. Slow Motor Development
- 4. Appearance
  - a. Unusual facies
  - b. Small pointed jaw
  - c. Ears rotated forward
  - d. Intereanthal distance increased
  - e. Pouting of upper lip

*Treatment:*

- a. Low calcium diet
- b. Low vitamin D intake
- c. Cortisone therapy

*Summary*

Both of these patients were tremendously improved on the hypocalcemic diet and the elimination of vitamin D. "A recent report indicates that the fundamental defect is a distortion of cholesterol metabolism whereby an

Foods Included and Excluded in Low Calcium Diet  
(Qualitative).

<i>Type of Food</i>	<i>Foods Included</i>	<i>Foods Excluded</i>
Beverage	Carbonated beverage	Chocolate flavored drinks, cereal beverage milk drinks
Bread	White and light rye bread or crackers	Whole grain or soybean bread
Cereal	Refined cereals	Chocolate-flavored cereals; oatmeal whole-grain cereals
Desserts	Cakes, cookies, gelatin, pastries, puddings; sherberts, all made without chocolate, milk or nuts; if egg yolk is used it must be from 1 egg allowance	Any other
Fat	Butter, cream, 2 tablespoons daily, French dressing, fortified margarine, salad oil, shortening	Cream except in amount allowed; mayonnaise
Fruit	Canned, cooked, or fresh fruit or juices	Dried fruit
Meat, egg or cheese	3 oz. daily of any meat, fowl, or fish except clams, oysters, or shrimp; not more than 1 egg daily including what is used in cooking.	Clams, oysters, shrimp and cheese
Potato or substitute	Potato, hominy grits, macaroni, noodles, refined rice, spaghetti	Whole grain rice
Sweets	Candy without chocolate, molasses, milk or nuts; honey, jam, jelly, sugar, syrups except molasses and maple syrup	Candy made with chocolate, molasses, milk, or nuts; maple syrup, molasses
Soups	Broth, vegetable soup made from vegetables allowed	Bean or pea soup, cream or milk soup
Vegetable	Any canned, cooked or fresh vegetable or juice except those listed under "Foods Excluded"	Rhubarb
Miscellaneous		Do not eat chocolate, cocoa, milk, gravy, nuts, olives, white sauce, dried beans, broccoli, green cabbage, celery, collards, endive, greens, kohlrabi, leaf lettuce, okra, parsley, parsnips, dried peas, rutabagas, spinach, water cress, lentils.



excessive quantity of an abnormal antirachitic steroid is produced in the serum in association with one of the lipoprotein fractions."<sup>2</sup> X-ray, even in early cases, frequently shows thickened band metaphysial margins of the metacarpals. Our patients showed no evidence of abnormalities on x-ray examination.

## REFERENCES

1. Wilkins, L.: The Diagnosis and Treatment of Endocrine Disorders in Childhood and Adolescence. 2d ed. Springfield, Ill., Thomas, 1957, p. 422.
2. O'Brien, D., Peppers, T. D., Silver, H. K.: Idiopathic hypercalcemia of infancy. J.A.M.A. 173: 1106, 1960.

## CURRENT PROBLEMS IN THYROID DISEASE

FURMAN T. WALLACE, M. D.

RICHARD S. WILSON, M. D.

MICHAEL F. PATTON, M. D.

*From Departments of Surgery and Pathology*

*Spartanburg General Hospital*

*Spartanburg, South Carolina*

From the standpoint of management and surgical technique, thyroidectomy has stabilized into a very satisfactory procedure with excellent results. In fact, when all of the known precepts of thyroid management are followed, it is only in an occasional instance that the results are not satisfactory.

In a review of 259 thyroidectomies done by us, the results were satisfactory in almost every case. The mortality rate was one in 259 cases. Down through the years certain principles of thyroid management and thyroid technique have developed and have given excellent results in most types of thyroid disease. However, because of new developments in radioactive isotopes and antithyroid drugs, certain new problems in management have arisen. Some of these problems have been clearly delineated by Prioleau.<sup>1</sup>

The diagnosis of hyperthyroidism in a severe case is not difficult; however, the mild or the borderline case may present a problem. The history and physical findings are still the most reliable factors in the diagnosis. Laboratory tests may be helpful in the confirmation of clinical suspicions. The protein bound iodine test is widely available and usually reliable. When definitely elevated, the PBI indicates

In the review of their own thyroidectomies, Drs. Wallace and Wilson found that the results were satisfactory in almost every case. The mortality rate was 1 in 259 cases. With the development of radioactive isotopes and antithyroid drugs, certain new problems have arisen. Radioactive iodine has contributed a great deal to the diagnosis of thyroid problems. It is particularly valuable in localizing metastasis from thyroid cancer.

Previous administration of iodine by medication, contrast media, etc., may give false readings of the diagnostic tests. Thyroiditis is quite common and the management is discussed. The use of anti-thyroid drugs as the only treatment of hypo-thyroidism is still in experimental stages. The status of  $I^{131}$  in treatment of hyper-thyroidism has not been determined. Thyroidectomy is still the standard treatment of diffuse toxic goiter.

hyperthyroidism, and when low, the PBI indicates hypothyroidism. In the borderline readings it is not of much value.

Uptake studies done with radioactive iodine have contributed a great deal to the understanding and management of thyroid disease. The  $I^{131}$  uptake has proven to be of considerable value in the diagnosis of hyperthyroidism. An elevated  $I^{131}$  uptake usually indicates hyperthyroidism. The value of localizing meta-

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stases from functional thyroid cancer has been well established and will not be discussed further here. Scanning scintograms with  $I^{131}$  have at times delineated neck metastases that were otherwise unrecognized.<sup>2</sup>

The BMR should be and, when properly accomplished, is a good test. It has fallen into disrepute because of technical errors and machine design. Even with the present machines, it is of value when the patient is properly prepared and should be used. One of the disadvantages of the present machines is that the patient must push a bellows or drum up and down as he breathes, and many experience discomfort and apprehension. All we really need to know is the oxygen consumption in a certain length of time under certain standard conditions. We hope that a satisfactory machine to measure oxygen consumption will soon be developed.

Because of unfamiliarity with the technical difficulties relating to the PBI and  $I^{131}$  uptake tests, these very useful tests are frequently condemned unjustifiably by those physicians who receive results contrary to their clinical expectations. A brief review of their underlying principles may be in order.

The protein bound iodine test measures the iodine which is carried in the serum linked to protein molecules. Not all the iodine measured is in the form of thyroxine. Therefore, it is possible to obtain falsely high values when the patient has been exposed to either organic or inorganic iodine preparations. It is desirable to have available a routinely applicable procedure which would specifically measure thyroxine. Recently, a test which seems to measure only that iodine which is bound to the thyroid hormone has been devised and is called the BEI (butanol extractable iodine) test. When this becomes more widely used, many of the objections to the PBI will have been overcome. Suffice it to say generally that the PBI will be high if the patient has received iodides and low if he has recently received mercurials. The time interval required for the PBI to reflect the thyroid function after exposure of the patient to iodine varies and is touched on below.

The uptake of radioactive iodine by the thy-

roid gland is a physiological test of the function of the thyroid if we presume that the rate of iodine uptake is proportional to the manufacture of thyroxine by the gland. Within very broad limitations, this presumption is valid. It must be realized that the rate of absorption of the iodine from the intestine represents one important variable in the oral test. However, the most common source of dissatisfaction with the procedure is the alteration of thyroid activity and the "saturation" of the gland with iodine from medications, contrast media, etc. The following questions and answers serve as a useful guide.

Q. If a patient is on iodine therapy (Lugol's), when can an  $I^{131}$  uptake test be done?

A. One to three weeks are required to eliminate inorganic iodine. A three week interval is recommended. This applies to cough syrups, skin topical disinfectants and iodine douches also. A high uptake will be of value. A low one will raise the question of iodine interference.

Q. If a patient is on iodine therapy, when can a PBI be done?

A. After inorganic iodine is discontinued three weeks a PBI can be reasonably accurate. Table salt and foods do not affect PBI usually.

Q. If a patient has received iodine in an intravenous pyelogram or a cholecystogram, how soon can a PBI and  $I^{131}$  uptake test be done?

A. After an IV pyelogram (Renograffin) one to two weeks interval is required. Diodrast requires three months.

After cholecystogram with telepaque (iopanoic acid) about six months is required for elimination. Iodine is re-absorbed over and over from the intestine. We have seen interference with the PBI two years after a cholecystogram.

Q. If a patient is on iodine, how long before therapeutic radioactive iodine can be given?

A. The best procedure is to stop medication and wait three weeks. Radioactive iodine uptake is done and if at least a 30% uptake level is present, one may proceed. Advantage can be taken of the "rebound" activity of this thyroid gland which occurs 24 to 48 hours after

cessation of propylthiouracil in order to increase the uptake of the  $I^{131}$ .

Q. If patient is on anti-thyroid drugs or thyroid extract, how long before tests will be accurate?

A. Anti-thyroid drugs give a low uptake for 2 to 8 days. It is best to wait 10 days to be sure. Thyroid extract requires 1 to 2 weeks. Best to wait two weeks.

If a PBI or  $I^{131}$  uptake test is inconsistent, most errors are due to intake from medications, and the patient's medication list should be checked for iodine content.

The various laboratory aids are of known value. However, it must again be emphasized that the history and physical findings remain the most reliable factors in the diagnosis of hyperthyroidism.

In the foregoing paragraphs we have discussed some of the problems that arise in hyperthyroidism. But what of the other types of thyroid disease?

Thyroid disease is usually classified as follows:

1. Diffuse goiter, toxic
2. Diffuse goiter, non-toxic
3. Nodular goiter, toxic
4. Nodular goiter, non-toxic
5. Adenoma of the thyroid
6. Carcinoma of the thyroid
7. Thyroiditis

Some of the current problems in diffuse toxic goiter have been discussed already. Diffuse goiter, non-toxic, is simply colloid goiter and usually responds to iodine therapy. Nodular goiter whether toxic or non-toxic is always treated by thyroidectomy. The usual preparation is used in toxic nodular goiter to prepare the patient for surgery. Management of adenoma of the thyroid has been well established.<sup>3</sup>

All solitary nodules of the thyroid should be removed because of the danger of malignancy. Carcinoma of the thyroid has many complex problems and will not be discussed here.

Thyroiditis may be divided into three types. Each type of thyroiditis has different problems in diagnosis and management which have been published in some detail elsewhere.<sup>3, 4</sup> The three main groups are:

I. Acute thyroiditis or the suppurative type

2. Subacute thyroiditis or deQuervain's disease which is also called pseudo-tuberculous or giant cell granulomatous thyroiditis.

3. Chronic thyroiditis which can be divided into

- (a) Hashimoto's disease which is also called struma lymphomatosa
- (b) Riedel's struma which is also called woody or ligneous thyroiditis.

1. Acute thyroiditis is simply infection and suppuration of the thyroid gland by pyogenic organisms.

2. The second type of thyroiditis is subacute thyroiditis or deQuervain's disease. The etiology is not definitely established, and the possibility of a virus being the cause has been considered. The course of the disease is long, and the process may last from two weeks to several months. Another theory on the etiology is that it may be due to an autoimmunization with the patient's own colloid.<sup>4</sup> It is interesting to note that this type of thyroiditis can be reproduced in experimental animals when injected with the saline extract of their own thyroid tissue.<sup>5</sup>

3. Chronic thyroiditis is a broad classification and actually consists of two conditions. (a) The first is Hashimoto's disease. It is characterized by infiltration of the thyroid gland with lymphocytes. Exploration of the thyroid gland is of value in establishing the diagnosis and in ruling out carcinoma. Also the trachea can be decompressed at this time by removal of the isthmus.

(b) The other type of chronic thyroiditis is Riedel's struma. The process consists mainly of fibrous replacement of portions of the thyroid gland. The etiology has not been established definitely, but the fibrosis of the thyroid gland can probably be due to different causes. Surgical exploration is required to differentiate the condition from carcinoma of the thyroid. The isthmus and anterior portion of both lobes are removed to decompress the trachea. We prefer not to use needle biopsy because of the danger of seeding carcinoma cells and of the inaccuracies in diagnosis. Frazell<sup>6</sup> has found that the error in needle biopsy is too large. Hypothyroidism can usually be anticipated in any type of thyroiditis and should be watched



for carefully. Replacement therapy should be started early.

### Discussion

The place of iodine therapy is well established. It is of particular value in inducing a remission in preparation for surgery in the milder cases. The use of anti-thyroid drugs in preparation of the patient for surgery is also well established. The patient can be brought back to a more nearly normal metabolic stage in preparation for surgery.

For some time now experimental work has been done on the treatment of hyperthyroidism with anti-thyroid drugs alone. The results have been temporarily satisfactory; however, the recurrence rate has been too high for this to be used as the only treatment. What is the role of radioactive iodine in the treatment of hyperthyroidism? The status of  $I^{131}$  in the treatment of hyperthyroidism has still not been determined. Longer term follow-ups are necessary to establish its place. The treatment of hyperthyroidism with  $I^{131}$  should be still considered experimental at this time and should be limited to centers that can do carefully controlled studies with adequate follow-up.

At the University of California (Los Angeles) all cases of hyperthyroidism over a long period were treated with  $I^{131}$ .<sup>2</sup> It would probably be better to alternate between treatment with radioactive iodine and treatment with thyroidectomy. This would emphasize that it is an experimental procedure and not produce misconception in the medical students. It would also provide some training for the surgical residents in thyroid surgery. A better control series for the study would be provided.

Certain hazards of radioactive iodine have been established. The dangers of  $I^{131}$  therapy are similar to those of x-ray therapy. Rooney<sup>7</sup> has found that carcinoma of the thyroid occurs

much more frequently in children who had x-ray therapy for benign childhood conditions such as enlarged thymus. Approximately one-third of the children found to have thyroid carcinoma had received prior radiation for non-malignant conditions.

Also the occurrence of leukemia after ionizing radiation has been noted. Lewis<sup>8</sup> has done a follow-up of 1,400 individuals who had received x-ray therapy as infants for enlarged thymus. Seven confirmed cases of leukemia were encountered. The leukemia occurred on an average of 15 years after the x-ray therapy. There were no cases of leukemia in a similar size control group. It is noted that leukemia occurred in one in 200 of the patients who had x-ray therapy to the thymus.

Sheline<sup>9</sup> noted the occurrence of thyroid nodules in three of eighteen patients that were less than 20 years old following  $I^{131}$  therapy. The nodules seemed to be true neoplasms, and one was classified as a low-grade carcinoma.

### Summary

A series of 259 thyroidectomies were reviewed. The mortality rate was one in 259 cases.

The current treatment of thyroid disease is very satisfactory. Some of the new problems that have arisen have been discussed. Iodine is still of value in the pre-operative preparation of the less severe case of hyperthyroidism. Anti-thyroid drugs are of great value in preparing the more severe case of hyperthyroidism for surgery.

$I^{131}$  uptake studies have been a definite advance in studying certain cases. The use of  $I^{131}$  in the treatment of hyperthyroidism is still experimental. It should be limited to carefully controlled experimental groups with long follow-up.

The types of thyroid disease including thyroiditis have been presented.

### REFERENCES

1. Prioleau, W. H.: Problems in thyroid disease. *Tri-State M. J.* 7:14, Feb. 1960.
2. Pollock, W. F., Sprong, D. H., Jr.: Thyroid surgery at the U. C. L. A. Medical Center. *Am. Surgeon* 25:860, 1959.
3. Wallace, F. T., Wilson, R. S.: Adenoma of the thyroid. *Tri-State M. J.* 2:10, April 1954.
4. Wallace, F. T., Wilson, R. S.: Thyroiditis. *J. South Carolina M. A.* 54:213, 1958.
5. Witebsky, E., Rose, N. R., Terplan, K., Paine, J. R., Egan, R. W.: Chronic thyroiditis and auto-immunization. *J. A. M. A.*, 164:1439, 1957.
6. Frazell, E. L., Foote, F. W., Jr.: Papillary cancer of the thyroid. *Cancer*, 11:895, 1958.
7. Rooney, D. R., Powell, R. W.: Carcinoma of the thyroid in children after x-ray therapy in early childhood. *J. A. M. A.*, 169:1, 1959.
8. Lewis, E. B.: Leukemia and ionizing radiation. *Science*, 125:965, 1957.
9. Sheline, G. E., Lindsay, S., Bell, H. G.: Occurrence of thyroid nodules in children following therapy with radioiodine for hyperthyroidism. *J. Clin. Endocrinol.* 19:127, 1959.

# OPHTHALMODYNAMOMETRY IN THE DIAGNOSIS OF INSUFFICIENCY OF THE INTERNAL CAROTID ARTERY

GEORGE S. CROFFEAD, M. D.

*Charleston, S. C.*

**T**he purpose of this paper is to describe ophthalmodynamometry and the work that is being done with this technique.

When the ophthalmodynamometer was designed by Bailliant in 1917 and when Koch<sup>2</sup> in 1945 contributed his extensive review of the literature, all attention was given to the measurements and physiology of the pressure in the retinal capillaries. Only recently has the ophthalmodynamometer been recognized as a tool in the diagnosis of insufficiency of the internal carotid artery.

The first branch of the internal carotid artery is the ophthalmic artery. Since it is from this vessel that the central retinal artery arises, the pressure in the latter has been found to be indicative of the blood pressure of the internal carotid artery. The ophthalmodynamometer affords a method of measuring this pressure, easily, quickly, safely and accurately.



The ophthalmodynamometer is a simple instrument consisting of a spring loaded plunger within a sliding barrel. The plunger is calibrated to indicate tension in the range of 20 to 150 grams. The barrel is equipped with a brake so that the plunger can be stopped at any point for a reading. Following dilatation

Ophthalmodynamometry gives us a means of detecting insufficiencies of the internal carotid arteries by measuring the blood pressure of the ophthalmic arteries which is directly the same as that of the internal carotid arteries. A 15% or greater difference in the pressures of the two eyes is considered significant of insufficiency of the internal carotid artery on the side of the lower pressure. A case history is presented showing the importance of ophthalmodynamometric studies in both the diagnosis and in follow-up after surgical treatment. Ophthalmodynamometry and carotid angiography are the two most sensitive tests available today for determining the status of the internal carotid arteries.

of the pupil with Paredrine or Neosynephrine (10% solution) and the local application of Ophthaine or Tetracaine (0.5% solution), the convex metal foot plate of the ophthalmodynamometer is placed against the sclera at the point of insertion of the lateral rectus muscle. While the examiner observes through the ophthalmoscope the behavior of the central retinal vessels, the Bailliant instrument is pressed against the globe until arterial pulsation occurs. The brake is applied and the instrument is read. This is the diastolic pressure, the point at which the intraocular pressure has reached that of the diastolic blood pressure. The instrument is then replaced and the pressure applied quickly until the arteries blanch and pulsations cease. This is the systolic arterial pressure. If one prefers, the systolic pressure may be measured by bringing the pressure quickly to 150 grams and then decreasing the pressure against the globe until pulsation again occurs. The latter technique is preferred for two reasons. This greater pressure is used for a shorter period of time, and frequently, in cases with hypertension, there

may yet be pulsation at 150 grams of pressure, ending the systolic reading immediately at 150 grams plus.

We are primarily interested in the difference between the arterial pressure in the two eyes. Therefore, it is not necessary to convert the readings from grams to millimeters of mercury if the intraocular pressure is normal. It has been the experience of Perry,<sup>3</sup> Heyman,<sup>1</sup> Sveine and Hollenhorst,<sup>6</sup> Thomas and Petrohelis,<sup>4</sup> that a difference of 15% or greater suggests significant internal carotid insufficiency on the side of the lower reading.

Thomas and Petrohelos,<sup>4</sup> in 1953, reported pressure measurements of 58 normal cases. The difference between the two eyes ranged from 0 to 15% in the diastolic pressure and 0 to 12% in the systolic pressure. In eight cases of carotid occlusion substantiated by angiography, seven had definite lowering of the ipsilateral retinal arterial pressure. Perry<sup>3</sup> and others, in 1958 found the same range of difference in normal cases. In a series of seven patients the pressure differential in the two eyes was greater than 15%. Six were found by angiography to have obstructing lesions of the internal carotid artery. Sveine and Hollenhorst<sup>6</sup> studied eleven patients after ligation of the internal carotid artery and found significant differences in retinal arterial pressures which ranged from 25% to 50%; these readings persisted for periods of six months to ten years. Following ligation of the common carotid, marked differences in retinal pressures were also observed but did not continue because of the collateral circulation from the external carotid artery. All were substantiated by angiography.

Although it is not to be substituted for carotid angiography, which at present is the only means of localizing obstruction in the vessels, it is believed that ophthalmodynamometry is an excellent "case-finding" tool. In the diagnosis of carotid insufficiency it is much superior to the less accurate methods such as compression of the opposite carotid to produce syncope and palpation of the carotid pulse in the neck or through the pharyngeal wall.

Of equal importance is its use in following the treatment of these patients. During the

short time this instrument has been in my use, six cases successfully treated with anticoagulants and two successful by-pass cases have been followed with equal pressures of the two eyes indicating continued success of the treatment. Smith<sup>4</sup> reported several cases treated by endarterectomy, carotid ligation and anticoagulant therapy which he had followed by ophthalmodynamometry. He cites one case of carotid cavernous fistula which was treated by ligation of the carotid with a Poppen clamp. Upon application of the clamp, the arterial pressure on that side dropped to a very low reading. Several days later the pressure in the retinal vessel of the ipsilateral eye was again elevated, suggesting that the clamp may have slipped from the artery. Surgical intervention proved this to be a fact.

Since the classical history of transient ipsilateral blindness (amaurosis fugax) and contralateral hemiplegia is found in less than 15 to 25% of the cases, and since the other signs of hemiparesis, aphasia, cortical-sensory disturbances, and homonymous field defects are not conclusive of internal carotid artery obstruction, more definite information is needed. Ophthalmodynamometry can be of positive value and should be done prior to angiography. In addition to helping to make the diagnosis, this initial reading serves as an index of the efficacy of treatment.

*Case Report:* A 61 year old lady was admitted to the Medical College Hospital August 11, 1959 with a one and a half year history of dizziness, intermittent attacks of aphasia and uselessness of the right arm, recurrent three to four times a day; symptoms were relieved by lying down. She has never had an "attack" while in a reclining position. Hazy vision was present only during the dizziness and was bilateral. Physical examination revealed the following positive findings:

Blood pressure 140/80 mm. Hg. reclining  
170/70 mm. Hg. standing

Through a pinhole, vision was 20/20 O. U. The intraocular pressure was 16mm of Hg in each eye. Visual fields were normal, and there was normal optokinetic nystagmus.

Ophthalmodynamometry, supine, revealed the following pressures:

O.D. 130/50	Standing O.D. 140/50
O.S. 90/30	O.S. 70/20

The difference between the two eyes ranged between 30 and 60%, strongly suggesting occlusion of the left internal carotid artery. Cerebral angiograms by Dr. Capers Smith revealed constriction of the left internal



carotid near its origin and a huge aneurysm of the right internal carotid near the bifurcation of the common carotid. On August 20, 1959 Dr. L. B. Jenkins performed a Teflon graft by-pass from the left common to the internal carotid artery. At surgery the left internal carotid artery was found to be constricted severely by a ring of calcium. On August 25, 1959 ophthalmodynamometry was repeated and pressures were equal in the two eyes.

O.D. 110/30

O.S. 110/40

On September 19, 1959 angiography demonstrated patency of the graft. All previous symptoms had been relieved.

#### Summary:

Ophthalmodynamometry is of great value both in the diagnosis and in following the

treatment of occlusive disease of the internal carotid artery. Its measurement of the retinal arterial pressures accomplishes this in a rapid, easy and safe method.

The indications for ophthalmodynamometry are as follows:

1. Amaurosis fugax.
2. Cerebral vascular disease (strokes, pulseless disease, etc.)
3. Prior to cerebral angiography.
4. Internal carotid artery occlusion under treatment (anti-coagulant endarterectomy, by-pass).
5. Before and after carotid ligations.

#### REFERENCES

1. Heyman, A., Karp, H. R. and Bloor, B. M.: Determination of retinal arterial pressures in diagnosis of carotid artery occlusion, *Neurology*, 7:97, 1957.
2. Koch, F. L. P.: Ophthalmodynamometry, *Arch. Ophthalm.*, 34:234, 1945.
3. Perry, R. B. and Rose, J. C.: Clinical measurement of retinal arterial pressure. *Circulation*, 18:864, 1958.
4. Smith, J. Lawton, Zieper, Orving, H., and Cogan, David, G.: Observations on ophthalmodynamometry, *J.A.M.A.* 170:1403, 1959.
5. Svien, H. J., Hollenhorst, R. W.: Pressure in retinal arteries after ligation or occlusion of the carotid artery, *Proc. Staff Meet. Mayo Clinic* 31: 684, 1956.
6. Thomas, M. H. and Petrochelos, M. A.: Diagnostic significance of retinal arterial pressure in internal carotid involvement, *Am. J. Ophth.*, 36:335, 1953.

*Treatment of hemorrhoidal thrombosis*, W. Clough Wallace, M. D. (Greenville) (*South. M. J.* 54:264, Mar. 1961.)

The author notes the disorganized training in the treatment of hemorrhoidal thrombosis and the lack of understanding that the object of treatment should be relief of discomfort and return to work as soon as possible without fear of recurrence. He outlines his present concepts of etiology and treatment.

External thrombosis, up to about one centimeter in diameter, is treated with an initial dose of 200 mg. of Tandearil followed by 100 mg. every 4 hours for 24 hours, then 100 mg. 4 times a day for 3 or 4 days. Relief is gained after the second dose and no time has been lost from work.

He feels that all other thromboses should have immediate combined hemorrhoidectomy, using Tandearil as above until time of surgery. He is opposed to waiting for subsidence of prolapsed internal-external thromboses before surgery and presents an amputative operation he has found useful for one or both sides in this condition.

Reactions to Tandearil have been few and mild, with the short-term therapy recommended, and regress on discontinuing the drug. It has been used successfully at times when circumstances did not permit surgery.

W. Clough Wallace, M. D.

# THE PHILOSOPHY OF ELECTRO-SHOCK THERAPY

CHAPMAN J. MILLING, M. D.

*Medical Director,*

*Waverley Sanitarium,*

*Columbia, S. C.*

A recent panel discussion of electro-shock therapy has prompted the writer to share the benefit of nearly 20 years experience in the use of this proven method. Only a brief discussion of the technique of E. S. T. is required as the method is simple, relatively safe and flexible enough to be suited to the individual patient. There are several excellent machines on the market, the simpler ones, having the minimum number of "gadgets" being the best. The writer has found that, in most cases, a voltage of 140 and 1500 milliamperes timed for half a second is about the optimum charge. Small patients may require less; large patients more. Whether or not to employ Anectine-Pentothal (Succinylcholine Chloride and Thiopental Sodium) anesthesia should be decided on a number of factors, including the patient's musculature, the presence of cardiac disease, osteoporosis or other hazards, even the financial status of the family, as this addition adds materially to the cost. It must also be remembered that Anectine-Pentothal itself is a hazard and if used makes the presence of a trained anesthesiologist advisable. In the great majority of cases a simple barbituate sedative such as sodium amytal, 3 to 6 grains, half hour before treatment, plus atropine sulfate, 1/100 or 1/150 grain by hypo is everything needed for sedation. The patient will be sufficiently conscious to cooperate yet will have little or no recollection of the preparations for treatment, even of getting on the table.

When the convulsion has terminated the patient should be watched carefully for respiratory embarrassment and assisted in breathing by the simple expedient of raising the arms a time or two. Of course, oxygen should always be available and a respirator of some kind. Dr. Edward M. Burn, of the South Carolina State Hospital, has devised an excellent, inexpensive

and simple device which channels the oxygen directly into the upper respiratory passage. It has been the writer's experience, however, that artificial help is seldom necessary except in those cases where Anectine-Pentothal anesthesia has been employed.

The real purpose of this paper, as its title implies, is not to elaborate on technique, but to suggest a few proven points concerning what to say to the patient and his family. First, the administrator of E. S. T. should know what *not* to tell the family. No elaborate claims should ever be made. The family should simply be told that E. S. T. offers a good chance of remission or at least of symptomatic relief, especially in the depressions, whether psychogenic or reactive. It should be emphasized that no change in basic personality traits may be expected. Shock will not make a pessimist into a Pollyanna nor a miser out of a spendthrift. As one seasoned old railroader told the writer, "It'll fix the engine and put it back on the track and then it's up to the engine; shock can't fix the track." I have quoted this literally hundreds of times in talking to patients and their relatives, as I think it expresses the whole concept better than anything I could say. So often the salty language of the working man cuts through a maze of scientific argot.

A question so often asked by the family is: "How does shock treatment work? What does it really do to the brain or the mind? And is there danger of permanent brain damage or loss of memory?" The first two questions must be answered with an honest "We really don't know just what it does, only that it works. We do know that it somehow breaks up morbid patterns of thought. For a time it makes the mind a blank and may be compared to shaving the surface of a bad phonographic record and making it possible to cut a new and clearer

groove. Our knowledge of the brain is not yet sufficient to say how this is done but we think that rest is at least a part of it. Just as you splint a broken arm to give it a chance to heal, or collapse a tuberculous lung to give it rest, so an overactive, tense, anxious mind is rested by electro-shock. It gives normal thought patterns a chance to take over once more."

As to the question of permanent brain damage, one can only speak from experience. There are many patients alive and well, functioning on at least a working level, who have had series after series of E. S. T., the treatments adding up into the hundreds. Perhaps these people have experienced more permanent loss of memory, there are indications that some of them may have indeed have, but the benefit gained far outweighs the insignificant damage. Certainly in the vast majority of cases there is complete recovery of memory within two or three weeks.

Both the patient and the family should be informed of the temporary amnesia following shock, and should indeed be advised that it is a necessary factor, probably that which actually produces the beneficial result. A simple explanation is that it eliminates the unhappy thoughts, the destructive drives, the fears and the tensions; at the same time necessarily disturbing some of the normal functions such as memory, but that soon after treatment has been discontinued the normal patterns will return.

When patients ask if a subsequent series is ever necessary, they are always told that such a series quite probably may be. At the same time they are reminded that additional shocks a year or two hence will again bring relief and may be repeated whenever necessary. They are reminded that one series of penicillin shots does not eliminate the possibility of future infections.

Perhaps the greatest number of questions is concerned with the danger involved. This must be neither minimized nor exaggerated. It is well to explain that death from cardiac or respiratory failure is an extremely remote possibility, far less likely than, for example, from anaphylactic reactions following a typhoid shot or tetanus antitoxin. Death, then, may be dis-

missed as a calculated risk, where the odds are several million to one in the patient's favor. In cases where there is organic heart disease the risk should be clearly admitted and it should be explained that only when danger of exhaustion is present is shock justified. Such cases should always have the benefit of anectine-pentothal anesthesia.

The possibility of fracture, especially vertebral compression, should be touched on, as should the almost inevitable pain and muscular soreness which follow.

For many years, however, it has been the writer's custom to say to the family, "Yes, there certainly is some danger just as there is danger of your driving your car back to your home. Actually the odds are about the same in both cases." Nevertheless, it is well to obtain a signed agreement either from the patient himself, from the nearest of kin, or from both. This may be in the form of a simple permission or that of a legally worded waiver of responsibility.

The family will invariably ask how long the treatment will take and how many times constitute a series. The answer must be that there is no hard and fast rule but that from six to ten treatments will likely be sufficient. When pronounced amnesia develops it will be time to stop whether this occurs after as few as three or four or takes 12 to 15. Among hospitalized patients 10 is probably an average. Out-patients who generally are not as sick may require only five or six.

What restrictions should be imposed when the patient is dismissed? Practically none except he should not return to work for two or three weeks nor should he be allowed to drive a motor vehicle. When the amnesia has cleared he may resume normal activity, the sooner the better. A follow-up appointment in two to three weeks is desirable but not mandatory.

When shock therapy is suggested the patient's family is quite likely to ask, "What about the tranquilizers? Can't you give Johnny a pill that will do the same thing as shock without the risk and expense?" The trouble is that Johnny usually has three or four brands of these miracle drugs in his pocket when he arrives for his first appointment.



It has been mentioned that shock shows a higher percentage of successes in the depressions than in any other type of psychosis. This is certainly true, yet it is well worth trying in anxiety states and other neuroses, particularly the obsessive-compulsive type. How about schizophrenia? Definitely yes, in the catatonic form, which resembles, in several ways, the depressed phase of the manic depressive. In the graver forms such as the hebephrenic and the paranoid it is well worth trying, especially if given in the early stages. It is in these forms that prolonged treatment is indicated—20 or more. It will be surprising how many will respond favorably, not percentage-wise, but often enough to make it gratifying.

The writer cannot refrain from closing with one illustrative case. A 30 year old white male developed the delusion that he was the son of

God, exposed himself, talked to voices and masturbated constantly, even in the presence of his own mother and his wife. He was an introvert, somewhat effeminate in appearance who clinically demonstrated all the classic signs of schizophrenia. He had a dominant, possessive mother who was herself a borderline mental case and an intermittent drug addict. All the odds were against him, yet after 20 treatments he was able to go home, return to work, and make a reasonably good social adjustment. A factor in this patient's recovery which deserves due credit has been the splendid understanding and cooperation of his wife. She was able to give him badly needed confidence and support and hold together their marriage. He has been followed up at intervals and has so far had no recurrence of his psychosis.

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## PHYSICIANS AGAINST POLIO

In view of the fact that oral polio vaccine will not be generally available in sufficient quantities this year, the Board of Trustees of the A. M. A. and the Surgeon General both urge strongly that the medical profession encourage the widest use of the Salk vaccine in order to forestall the probable infections of polio which will arise with warm weather. Campaigns are urged and special concentration on the young ages, children under six years of age, is considered desirable, although a universal campaign plan has been developed for covering the field of "Babies and Breadwinners."

Early activity in this effort has been urged by all responsible organizations. The time is short and early efforts must be made if they are to be applicable to the coming polio season.

# BLEEDING ESOPHAGEAL VARICES IN CHILDREN

CHARLES B. HANNA, M. D.

WALTER D. HASTINGS, JR., M. D.

*Spartanburg, S. C.*

For years there has been considerable interest in the diagnosis and treatment of esophageal varices. We have been confronted with the problem of massive hemorrhage from such varices. This problem has often left us with memories of unsatisfactory results. In the search for the proper management of any future case similar to that to be reported, a search has been made to arrive at a logical and sound method of handling esophageal varices, especially as found in infancy and childhood.

Wallgreen<sup>1</sup> in 1926 and Fredlay<sup>2</sup> in 1931 described vividly the poor prognosis associated with esophageal varices of children. At least fifty percent of those patients with portal hypertension and bleeding esophageal varices, die if not treated definitively. Therefore, it is imperative that we find a way to handle this problem. This present review of this problem outlines the general management today.

Esophageal varices are an uncommon problem in children and are usually recognized with difficulty. The first clinical sign of the presence of esophageal varices in the majority of these young patients is either massive hematemesis or gross melena. This brings immediate concern to anxious parents. They in turn expect prompt medical recognition of the seriousness of the problem.

Hematemesis usually indicates massive hemorrhage into the stomach. Once the mouth and oral cavities are eliminated as a source of hemorrhage, the differentiation of origin lies between hemorrhage of the esophagus and the stomach. If the child can accept a Sengstaken-Blakemore tube, the origin of the hemorrhage can quickly be ascertained. Once the tube is in place and the balloon inflated and the stomach aspirated, there should be no more fresh blood aspirated.

More often the parents have noticed gross melena and a pale weak child as the cause of concern. This may lead the physician into an

A review of the problems and management of bleeding esophageal varices in children is presented. A case report is given to illustrate this problem. It is concluded that severe esophageal hemorrhage may require esophageal resection for definitive management of the hemorrhage.

extensive search for the etiology of tarry stools. If the surgeon suspects esophageal varices, he can usually get considerable help from the radiologist. A careful esophagram and upper gastro-intestinal roentgenographical study will often reveal the typical beaded or necklace appearance of esophageal varices. The finding of an enlarged spleen should point suspicion toward esophageal varices as the probable site of the hematemesis. It is not common in children to find esophageal varices associated with peptic ulcers.

Esophagoscopy provides an accurate diagnostic procedure. Since we are dealing with children it is our feeling that such examinations should be done under a general anesthetic. Often it is necessary to delay the esophagoscopy until the patients hemodynamics can be restored to normal.

Esophageal varices have a characteristic appearance on esophagoscopy. They usually are seen at the distal 2 to 2½ inches of the esophagus as bluish, balloon-like protrusions into the lumen. Typically there are three groups, one anterior and two posteriorly. They are distended to varying degrees and may form clusters. Often they seem almost to rupture. They will flatten out if the esophagoscope presses against them. An active bleeding point is not often identified.

Butler<sup>3</sup> has classified the esophageal veins as: 1) intrinsic, including subepithelial, submucous, and perforating; 2) extrinsic (or subserous) which are formed by the union of groups of perforating veins; and 3) vena comi-

antes of the vagal nerves, which run longitudinally in the adventitia of the esophagus. Whipple<sup>4</sup> in 1945 brought attention to the two main groups of increased portal pressure: (a) extra-hepatic, from obstruction in the portal vein itself as a result of thrombosis, fibrosis, or congenital malformation; (b) intra-hepatic, from the various types of cirrheses. In either case the mechanism of esophageal varices is similar; they are produced through obstruction of the portal system and thus dilitation of the tributary veins. In the case of esophageal varices, it is through the coronary veins.

Differential diagnosis of intrahepatic from extrahepatic obstruction is not usually a difficult one in children. The history is usually helpful. In Sandblom and Ekman's<sup>5</sup> group of cases under 20 years of age, eight of 33 cases with portal hypertension were the intrahepatic type. Most cases fall into the extrahepatic type and give a history of peritonitis in the first few weeks of life. The infection, however, may be cellulitis, osteomyelitis, abscesses, otitis media, etc. From these infections thrombi reach the portal system.

In most instances the infant seems to do well for a few months following the acute septic process. In some cases gradual enlargement of the abdomen from the development of ascites is the first sign of portal vein obstruction. Usually the liver is not enlarged. There is almost always splenomegaly where ascites is present.

Clatworthy and Boles, Jr.<sup>6</sup> found the forward displacement of the C-loop of the duodenum indicative of retroperitoneal edema and of diagnostic value. They suggest intravenous pyelograms if a retroperitoneal tumor is suspected. At laparotomy the portal venous pressure may be elevated to as high as 520 mm. of water. In cases of extrahepatic obstruction there is usually good liver function. In most children repeated episodes of hematemesis occur before a definite diagnosis of portal venous obstruction can be made.

While the esophageal hemorrhage often makes the diagnosis relatively simple, the treatment is usually not. During active bleeding or after excessive loss of blood, the following procedures may be used:

1. Transfusions of whole blood until the hematocrit reading is normal and no evidence of active bleeding is present.
2. Balloon tamponade by the Sengstaken-Blakemore tube until hemorrhage has stopped. This pressure can usually be released after 24 hours. If active bleeding occurs the balloon need be only re-inflated.
3. Intravenous pituitrin in the treatment of the acute hemorrhage has been used by Schwartz *et al.*<sup>7</sup> We have not used this.
4. Emergency thoracotomy with ligation of the bleeding varices has been used in some instances.<sup>8</sup>
5. Injection of the bleeding varices with a sclerosing agent.<sup>9</sup>

It is our feeling that the use of esophageal sclerosing agents and ligation of the esophageal varices under emergency conditions is not generally good emergency treatment.

Definitive treatment has been a challenge. The following procedures have been tried in the management of varicose esophageal veins:

1. Portacaval shunts are now considered the preferable operation. This is sometimes impossible because of the technical hazards following peritonitis around the extra portal system.
2. Splenorenal shunt has fallen into disfavor because of the small caliber of the vessels. Their small diameter not only makes the technique of anastomosis difficult but also predisposes toward thrombosis. Most surgeons seem to have abandoned this procedure.
3. Omentopexy, splenectomy, splenic artery ligation and hepatic artery ligation have been tried and found of little general value.
4. Injection of esophageal varices with sclerosing agents has had considerable popularity.<sup>10, 11</sup> Most of the sclerosing compounds used in injecting varicose veins of the legs have been tried. We have not found that any single agent has distinct advantages over the others. Since we are dealing with children, a general anesthetic is required for each injection.



With a Norris needle and esophagoscope, it is not too difficult to inject the bulging varicosities. This procedure may cause scarring of the esophageal walls.

5. Partial esophagogastrostomy and colon transplant has gained some popularity.<sup>12</sup> These are truly major procedures which carry a high mortality. They do reduce the likelihood of gastric juice reflex and destroy the varicose veins.
6. Gastric resection.<sup>13</sup>
7. Opening the stomach and suturing over the mucosal wall in the antrum.<sup>14</sup>
8. Intra-esophageal ligation of varices as advocated by Crile<sup>15</sup> has had some favorable reports. If done, any periesophageal veins are also usually ligated.
9. Mediastinal packing as suggested by Som and Garlock<sup>16</sup> seems to have little merit that injection of sclerosing agents doesn't do better.
10. Partial esophagectomy seems to be the procedure now most generally chosen when portacaval anastomosis isn't satisfactory.

The following case is presented to illustrate the difficulties of managing esophageal varices in children.

At three weeks of age, this male child was admitted to the hospital with a 24 hour history of abdominal distress. The family physician had changed his formula but the abdomen became distended and the temperature increased. Nausea and frequent vomiting soon followed.

On admission he was well developed and nourished but dehydrated. The pulse was 160/minute and regular. The abdomen was moderately distended and no masses were palpated. The liver was three cm. below the costal margin.

A radiograph of the abdomen revealed several moderately distended loops of small intestine in the mid and left portions of abdomen. No gas was found in the large bowel. A barium enema revealed that the solution flowed rapidly through the colon as far as the ascending segment. The cecum and proximal ascending segment showed a large filling defect, which was apparently an intussusception of the small intestine. The mass was reduced during the administration of the enema.

A pre-operative diagnosis of intussusception was made. At laparotomy a fibrinous exudate covered the entire bowel. Firmly stuck adhesions of small bowel were released. No other cause of peritonitis was found.

Post-operatively, the patient responded to parental feedings, penicillin, and gastric suction.

At the age of two years, he was admitted again with 4.5 grams of hemoglobin, 5,100 leucocytes, with 42% segmented form, 2% stabs., 55% lymphs, and 1% Eosinl-Nophiles.

On November 14, 1953 he was admitted with sudden onset of gastrointestinal hemorrhage without warning. He had lesser hemorrhage three hours later with hematemesis. His mother had noticed melena only on one previous occasion. His hemoglobin was 7.95 grams/100 ml.

Esophagoscopy revealed two varices at the distal end of the esophagus on the posterior wall. There was no active bleeding. Radiologic examination of the gastro-intestinal tract revealed "some irregularity in the outline of the distal esophagus which might possibly be due to varices".

A diagnosis of esophageal varices with hemorrhage was made and a porta-caval anastomosis planned.

Laparotomy revealed a mass of bowel firmly adherent to itself throughout its entire length. Efforts to approach the hepatic area were unsuccessful, so a porta-caval shunt was abandoned. After five whole blood transfusions he was discharged with a hemoglobin value of 13.4 grams.

Two other massive hemorrhages in 1954 led to consultation with Dr. Robert Gross.

In November, 1954 Dr. Gross explored this boy. The spleen was removed in an effort to find a vessel for a spenorenal shunt. He then freed the lower end of the esophagus but found that peri-esophageal veins were very small. He then opened the fundus of the stomach and observed several enlarged veins in the esophagus and stomach. These were sutured over with catgut sutures.

In the spring of 1955 the patient had four other hospital admissions which required whole blood transfusions. At approximately monthly intervals in the fall of 1955 his esophageal varices were injected with Synalsol as a sclerosing agent. On the 17th of December, 1955 the following laboratory studies were made.

Cephalin flocculation—negative  
BSP—2.3% dye retained at 60 min.  
Icterus index 4 and urine negative for bile  
RBC—3,560,000  
WBC—11,350  
Hemoglobin—9.95 grams  
Segs. 68%  
Lymphs 29%  
Mono—3%

8 nucleated RBC to 100 WBC—Slight hypochromia and poikilocytosis, marked anisocytosis.

In January, 1956 he was transfused until his hemoglobin was 17.5 grams. This was preparatory to a partial esophagectomy and esophago-gastrostomy. On January 30th, 1956, through a left seventh inter-costal incision, the chest was entered. The esophagus was

difficult to free because of paraesophageal adhesions. The distal one-third of the esophagus was resected. There were large paraesophageal varices around the lower one-third of the esophagus. Pathological study revealed scarring of the esophagus as from a stricture. The stomach was freed by ligation of the vessels on the upper one-third of the stomach, an esophago-gastrostomy was then done using two layers of No. 30 cotton interrupted sutures. The chest wall was closed with No. 0 chromic and No. 30 cotton. A mild stenosis subsequently required that the esophagus be dilated three times. There has been no evidence of blood loss since.

### Discussion

The treatment of portal hypertension is a complex and often disappointing problem. Especially in children the disadvantage of size and scarring may prevent the most physiological approach, portacaval anastomosis. Should it not be feasible to do satisfactorily a porta-caval anastomosis, then it is our opinion that resection of the distal one-third of the esophagus with esophago-gastric anastomosis is the treatment of choice.

We feel that the advantages gained by inserting a loop of jejunum or colon between the esophagus and colon are outweighed by the increased technical difficulties with increased morbidity and possibly increased mortality. The injection of sclerosing agents into the varices will often give time to prepare the patient for elective surgery. This technique has been discarded in the treatment of hernias and hemorrhoids. We feel it will not be useful in all cases of esophageal varices. We suspect that some price may be paid in the future by destruction of the vagi when handling or resecting the esophagus.

### Summary

We have presented a general review of the management of esophageal varices in children with an illustrative case.

We wish to acknowledge the pediatric help from Doctors George D. Johnson, Samuel E. Elmore, and Fred F. Adams.

### REFERENCES

1. Wallgren: *Acta paediat*, 6: 1926.
2. Fredbärj: *Nord. Med.* 3: 1931.
3. Butler, H.: The veins of the oesophagus. *Thorax* 6: 276, 1951.
4. Whipple, A. O.: The problem of portal hypertension in relation to the hepatosplenopathies. *Ann. Surg.* 122: 449, 1945.
5. Sandblom, P. and Ekman, C. A.: Treatment of portal hypertension in children. *Arch. Dis. Childhood* 32: 61, 1957.
6. Clatworthy, H. W. and Boles, E. T., Jr.: Extrahepatic portal bed block in children: pathogenesis and treatment. *Ann. Surg.* 150: 371, 1959.
7. Sengstaken, R. W. and Blakemore, A. H.: Balloon Tamponade for the control of hemorrhage from esophageal varices. *Ann. Surg.* 131: 781, 1950.
8. Schwartz, S. I., Bales, H. W., Emerson, G. L., Mahoney, E. B.: The use of intravenous pituitrin in treatment of bleeding esophageal varices. *Surgery* 45: 72, 1959.
9. Ludington, L. G.: Study of 158 Cases of esophageal varices. *Surg. Gynec. & Obst.* 106: 519, 1958.
10. Patterson, C. O., and Rouse, M. O.: The sclerosing therapy of esophageal varices. *Gastroenterology* 9: 391, 1947.
11. Fearon, Blair, and Sass-Kortsak, Andrew: The management of esophageal varices in children by injection of sclerosing agents. *Ann. Otol. Rhin. & Laryng.* 68: 906, Sept. 1959.
12. Kopp, C. E., Roddy, S. R.: Colonic replacement of distal esophagus and proximal stomach in the management of bleeding varices in children. *Ann. Surg.* 147: 17, 1958.
13. Tanner, N. C.: Gastroduodenal hemorrhage as a surgical emergency (Discussion). *Proc. Roy. Soc. Med.* 43: 147, 1950.
14. Gross, Robert (Personal Communication).
15. Crile, G., Jr.: Treatment of esophageal varices by transesophageal obliteration. *Surg. Gynec. & Obst.* 96: 573, 1953.
16. Som, M. L., and Garlock, J. H.: New approach to the treatment of esophageal varices. *J.A.M.A.* 135: 628, 1947.



# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH

#### Right Axis Deviation With Myocardial Infarction

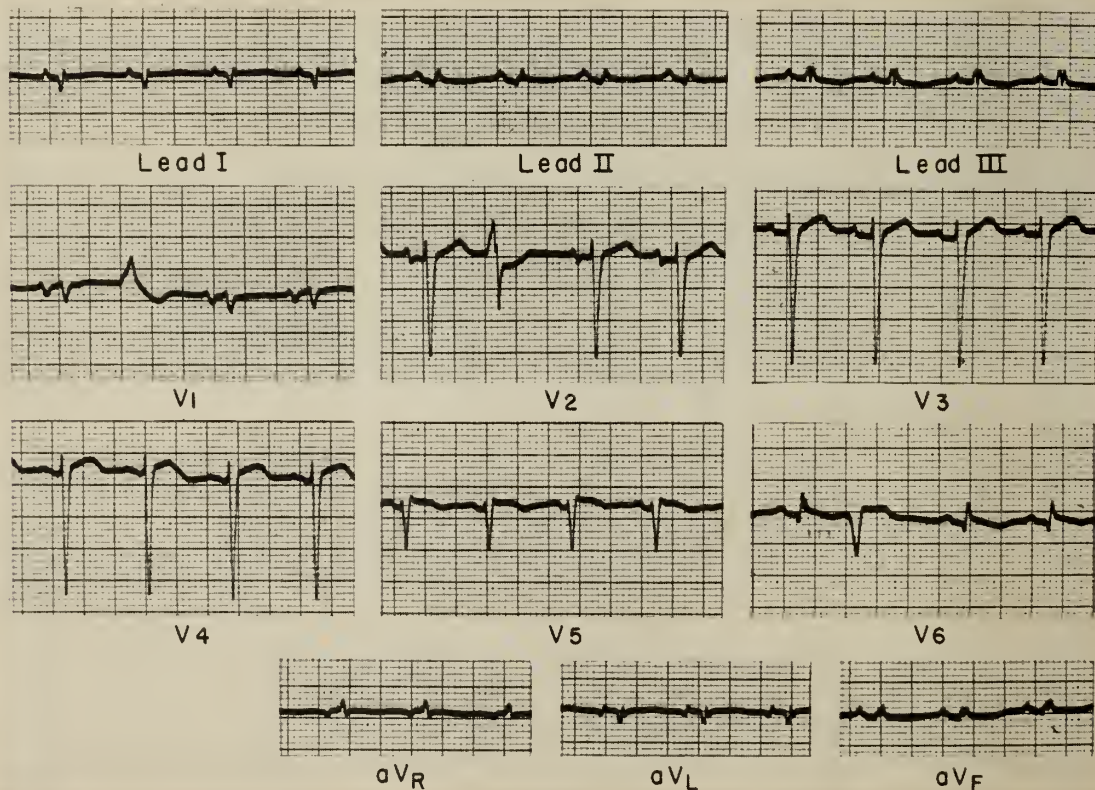
DALE GROOM, M. D.  
Department of Medicine

*Case Record*—This ECG is representative of several made on a forty-eight year old colored woman under treatment for diabetes and cardiac decompensation. Previously accustomed to heavy physical labor in the cotton fields, she had for several months experienced recurrent attacks of severe pain in the chest followed by dyspnea, dependent edema, weakness and a weight loss of some thirty pounds. Large amounts of pleural fluid had been removed by thoracentesis on several occasions. Subsequently a bronchoscopy, then an open thoracotomy with wedge resection biopsy of the right lower lobe had been performed because of the recurrent effusion on the right with a persistent roentgenographic density in that lobe. Pathologic

studies of the tissue had shown organized thrombus in the branch of pulmonary artery with infarction and necrosis of the distal lung tissue.

Medical management helped her little more than the surgery. Despite all the usual measures, plus anti-coagulant therapy, her clinical course was progressively downhill and was characterized by increasing signs of congestive failure, a prominent protodiastolic gallop rhythm, tachycardia and diffuse cardiac enlargement. She died suddenly two months after admission to the hospital.

Autopsy disclosed a dilated heart weighing 300 grams with very extensive subendocardial fibrosis and scarring involving most of the left ventricle and a 3.5 x 6.5 cm. area of fibrosis in the septum. There was complete occlusion of the anterior descending branch of the left coronary artery in its middle third and of the circumflex branch in its proximal third by old thromboses. Several mural thrombi were attached to the endocardial surface in the right ventricle, which was otherwise normal, and in the left, the largest lying at the apex. Multiple areas of old infarction





were found in both lungs and in one kidney. Severe central type necrosis in an enlarged liver was attributable to chronic congestive heart failure.

*Electrocardiogram*—The tachycardia is a regular sinus one frequently interrupted by ectopic beats which apparently emanate from a single focus in the left ventricle (simulating right bundle branch block). The ventricular complexes are of extremely low amplitude in all the limb leads. There is a right axis deviation, depolarization being directed away from the left arm and toward the right arm and left leg electrodes.

Clock-wise rotation is shown in the precordial leads with diphasic P waves in  $V_2$  and right ventricular type complexes as far to the left as  $V_4$ . R waves in  $V_5$  and  $V_6$  are grossly diminished, indicative of previous infarction of the lateral wall. Also the S-T segments are minimally elevated and the T waves are flattened or inverted in leads from the left side of the heart.

*Discussion*—Right axis deviation is distinctly abnormal in the adult. In past years when the three standard leads (with perhaps a fourth lead from the chest) were the rule, a popular electrocardiographic exercise was the determination of electrical axis by plotting the algebraic sums of the QRS deflections, usually of leads I and III, along the corresponding sides of the Eithoven triangle. Seldom, however, is that calculation resorted to now since the potentials at the three extremities comprising the triangle are well displayed in the unipolar leads AVR, AVL, and AVF and their axis can be seen in a glance. A QRS axis to the right and upward (upright complex in AVR) to this degree is unusual. That it is not due to switched leads is evident from the normal axis of the P waves; the ventricular potentials are selectively altered in direction as well as in magnitude.

Commonly, of course, it is hypertrophy of the right ventricle which shifts the adult QRS axis toward the right. But conversely, sufficient destruction of the left ventricle can tip the balance in the same direction. Thus myocardial infarction, largely confined to the left ventricle as it almost always is, can itself produce right axis deviation. Disturbances in ventricular conduction by damage to the bundle branches or their ramification can cause similar shifts but it is notable in this tracing that there is no prolongation of the QRS nor any indication of right ventricular hypertrophy. Actually voltage of the ventricular complexes in all the limb leads is greatly diminished, (always an ominous sign in the presence of gross cardiac enlargement), consistent with the extensive destruction of myocardium found at autopsy.

Pulmonary embolism likewise shifts the axis toward the right and it might be contended that it is a major factor here. However the QRS changes of pulmonary embolism are notoriously transitory, often persisting for only a few hours, while these abnormalities persisted unchanged throughout the patient's two month hospitalization. Frequently the clock-wise rotation (along the long axis, as viewed from below) also accompanies pulmonary embolism but there is no inversion of T waves in the right precordial leads here as one might expect in acute cor pulmonale. Doubtless most of this patient's electrocardiographic abnormalities are due to her multiple myocardial rather than her pulmonary infarctions.

Elevation of the S-T segments in the left precordial leads is minimal but it was a remarkably constant finding throughout her illness. Considered along with the marked cardiac enlargement, the gallop rhythm and intractable congestive failure, it might suggest aneurysmal dilatation of the left ventricle which may not be obvious in the undistended heart at autopsy.



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#### PATIENTS WITH EMOTIONAL AND NERVOUS DISORDERS

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#### PATIENTS WHOSE APPETITES SHOULD NOT BE STIMULATED

Among patients treated with ARISTOCORT, there was less appetite stimulation, especially in those who had previously gained weight on long-term therapy with other steroids.<sup>3</sup>

#### PATIENTS WITH HYPERTENSION

There was no blood pressure increase in any patient treated for bronchial asthma, and in some, blood pressure fell. Of these, three had been hypertensive.<sup>4</sup>

#### References:

1. McGavack, T. H.; Kao, K. Y. T.; Leake, D. A.; Bauer, H. G., and Berger, H. E.: *Am. J. M. Sc.* 236:720 (Dec.) 1958.
2. McGavack, T. H.: *Nebraska M. J.* 44:377 (Aug.) 1959.
3. Friedlaender, S., and Friedlaender, A. S.: *Antibiotic Med. & Clin. Ther.* 5:315 (May) 1958.
4. Sherwood, H., and Cooke, R. A.: *J. Allergy* 28:97 (March) 1957.

**Precautions:** Collateral hormonal effects generally associated with corticosteroids may be induced. These include Cushingoid manifestations and muscle weakness. However, sodium and potassium retention, edema, weight gain, psychic aberration and hypertension are exceedingly rare. In the treatment of allergic respiratory disorders, dosage should be individualized and kept at the lowest level needed to control symptoms. Dosage should not exceed 36 mg. daily without potassium supplementation. Drug should not be withdrawn abruptly. Contraindicated in herpes simplex and chicken pox.

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## President's Page

In this, my first communication to the members of the South Carolina Medical Association as your president, I wish to express my sincere thanks for the honor that you have given to me. I assure you that I shall do everything that is within my power truly to represent the Medical Profession in this state to the best of my ability. I wish also to reiterate much of what my predecessor, Dr. Joseph Cain, has said; THAT THE COUNTY MEDICAL SOCIETY, THE STATE ASSOCIATION, AND THE AMERICAN MEDICAL ASSOCIATION ARE YOU, AND THE ACTIONS AND POLICIES THAT ARE TAKEN BY THESE BODIES ARE AND SHOULD BE YOURS. It is, therefore, necessary that the profession should close ranks, and present a solid front to the public. It becomes, therefore, imperative that members of the county medical societies shall renew the interest that they must at one time have had, and attend regularly the meetings of these organizations.

In the past few years, there have been many proposed changes in the practice of medicine. For the most part, these have been opposed with success, or have been watered down so that their effectiveness has been greatly reduced. In the years to come, and certainly this year, many proposals are going to be introduced, and the success or failure of these measures will depend upon you, as a member of a united medical front.

So, I beseech you, to renew your interest in organized medicine, express your views, and work like mad for those things that you feel the profession should do, and against those things you feel should be opposed.

I CAN ASSURE YOU THAT THE TIME IS NOW, AND THE OPPORTUNITIES WILL BE LEGION.

Charles N. Wyatt

# Editorials

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## NEW OFFICERS

Another successful year of activity of the South Carolina Medical Association ended with the annual meeting of last month. Dr. Joseph Cain, the retiring president, devoted a tremendous amount of time, energy and enthusiasm to promoting the affairs which concern the Association as a whole and every one of its members. He made innumerable trips to all parts of the state, and served in many capacities which would make an exceedingly long list of activities. His was a job well done, and the Association is fortunate in having him still in touch with its affairs as a member of Council.

Dr. Charles Wyatt, the incoming president, has many plans in mind, and has served the Association vigorously and faithfully for many years in the past. The Association is happy to have such an able head, and a successful year seems assured under his leadership.

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## ECONOMICS OF THE HOUSE STAFF

Alarm has been expressed in many quarters over the decline in the number of good students who apply for medical education. Several explanations have been offered, and an editorial in *The New Physician*, Journal of the Student American Medical Association, offers an argument for increasing the financial returns to the House Staff members as a means of attracting candidates into the profession. This editorial proposes that many possible applicants are discouraged not only by the long period of medical school training, but also by the prolonged time which must elapse by virtue of the necessity for hospital training before a reasonable income can be expected. No desirable figure is named, but the editorial explains distinctly that an adequately satisfactory sum should be provided in order to promote the interest of the House Staffs and medicine in general.

This concept may very well be sound, but there are certain qualifying elements which

should be considered. Despite statements to the contrary, it would still seem that the intern year is essentially a part of the medical educational experience. It would be extremely unsatisfactory for the good of the young physician to avoid this year, and in fact he must take it in most areas. Most hospitals do not have unrestricted budgets, and if funds are to be increased in one area it is very likely that they must, of necessity, be decreased in other areas. Thus in a teaching hospital, if it became necessary to pay a very considerable amount above present salaries to members of the House Staff, it would probably be necessary to abstract the necessary money from the sum devoted to the purpose of teaching. Thus, while the intern would be better financially, he would be worse in point of training received.

In one familiar teaching hospital system, the budget for maintenance and sustenance of the House Staff runs to about two hundred thousand dollars annually. Stipends paid would seem to be within reason, ranging from approximately \$200 per month for interns to an average of about \$235 a month for residents. If these salaries were to be doubled, reaching a figure which has been advocated in some quarters, the hospital would be in a position for providing from some source another two hundred thousand dollars. If the teaching program were not to be endangered, this sum would have to come from the general budget of the hospital, and eventually would probably be passed on to the patient, who would have an added fillip to the rapidly ascending costs of his hospital care.

It would seem that in recent years emphasis has been turned increasingly on teaching experience and directed away to some extent from the older idea of actual service to patients. Which is of most importance it is hard to say, but certainly one should take into account the fact that the service to patients is one of the best approaches to permanent knowl-

edge, and possibly in a practical way it is even better experience than that derived from innumerable discussions on rather esoteric situations.

Not all House Staffs are eager workers, and some of them are only too willing and anxious to perform a minimum of work and get away from the hospital and into an unrealistic home life of relative ease which they can scarcely hope to continue in practice. If spokesmen for considerably increased stipends for House Staff members are to promote a successful campaign, it would seem well that they might at the same time impress upon these young physicians the importance of satisfactory performance and the realization that they are obligated to give a *quid pro quo*.

### THE MEDICAL EXAMINERS TROUBLES

An article in *Medical News* of March 24, 1961 gives a full discussion of remarks made by Dr. Harold E. Jervey, chairman of the South Carolina State Board of Medical Examiners and retiring president of the Federation of State Medical Boards of the United States. Dr. Jervey believes that the present disciplinary arrangements for policing unethical physicians constitutes one of the greatest weaknesses of today's medicine, and comments that Medical Society discipline is "ineffectual for the most part" and that there is a profound apathy and lack of responsibility by physicians as a whole. What concerns Dr.

Jervey particularly is the likelihood that the lawmakers will step in and produce legislation which will not be desirable for the medical profession, and that the only way to avoid this possible measure is for the profession to police itself vigorously and immediately. Dr. Jervey estimates that two to three per cent of physicians are legal offenders, and at least one per cent are narcotic addicts and that very little is being done about either category.

The American Medical Association has given full support to Dr. Jervey's position, although it has not been as vigorous in its charges. It believes that the matters which concern Dr. Jervey should come into open view and that uniformity in state disciplinary acts must be obtained in order to produce effectual means of communication between various parts of the country. Dr. McKeown of the A. M. A. committee believes that few areas are aware of the problems or else they are apathetic and unwilling to face the necessity for disciplinary action. State boards of examiners and state medical societies have perhaps not been forceful enough in promoting the necessary direction.

South Carolina may well be one of the backward states, if one may judge by the reaction which was created by the simple proposal to establish re-registration of physicians in order to obtain necessary information which would be applicable in situations where discipline may be necessary.



## BLUE CROSS . . . BLUE SHIELD



### OUR FIGHTING CHANCE

George Cooper, Jr., M. D.  
Charlottesville, Virginia

Edited by  
Richard J. Ackart, M. D.

The future of the physician-directed, non-profit Medical Service Associations—Blue Shield Plans—of the country depended a great deal upon the results of the recent presidential election. Had the people voted strongly for the platform of the national Democratic party; that is, for rapid development of a welfare

state (which would, of course, include medical care provided by taxation), these Associations would have been at least temporarily eclipsed and possibly would have headed for permanent dissolution. Fortunately, however, the 50-50 division between socialists and individualists which apparently exists in the United States, as reflected by the election results, indicates that there is still a fighting chance to preserve the basis of medical practice as we know it, the freedom to choose one's physician and his reimbursement by a fee for service rendered.

While there is still time, the medical profession must speedily re-evaluate its safeguards against government



encroachment in the light of today's popular and political thinking about medical care. And the profession must speedily strengthen those safeguards which are proving effective.

The starting point is recognition of the changed concept of the place of medical service in the American way of life. There was a time when medical service, like a college education, was regarded as a commodity to be purchased by those who could afford it, omitted by those who could not. And though generous physicians did a great deal of charity work, much needed medical service was not obtained. Today, however, complete medical service is considered a right of every citizen—to be supplied by the community when the individual cannot afford it. Medical Service is now regarded as a public service, like schools and police protection, to which everyone in society is entitled regardless of his personal ability to pay.

When recognizing this modern, public service concept of medical care, the profession must be keenly aware of the fact that a public service need must be met—or government steps in. For a good many years the vast majority of our fellow citizens have been convinced that this public service concept is indeed valid but, so far, they have not found a way to convert the concept to a reality. In order to do so, a growing number of citizens have become impatient enough to be willing to exchange the present system of medical practice for universal medical care paid for by government out of tax funds. For reasons familiar to us all, organized medicine and—happily—a few of our political leaders oppose the change on the grounds, not that the objectives should not be reached, but that it can be reached without federal medicine.

The effort by organized medicine to furnish all of our citizens their right to complete medical care has been concentrated in the physician-directed Blue Shield Plans, which offer as broad coverage as possible on a voluntary, non-profit basis to all who can be covered from an actuarial standpoint. Over the nation, this covers many thousands whom the commercial companies turn down as poor risks, and many other thousands who cannot afford the commercial carriers' rates. Blue Shield coverage, in terms both of services paid for and of people enrolled, is being broadened as rapidly as its economic and actuarial aspects permit.

The objective of organized medicine, then, is to prove through Blue Shield that voluntary prepayment to a non-profit organization—which does not disturb the patient-physician relationship nor the fee for service principle—can finance medical needs on so broad a scale that government medicine is not necessary. This is the most important task facing medicine today. Every citizen who has a sense of responsibility to his profession and understands the purpose of Blue Shield will join in the effort by becoming a Participating Physician in his local Blue Shield Plan. The House of

Delegates of the A. M. A. in Dallas in December, 1959, and again in Atlantic City in June, 1960, reiterated its support of Blue Shield. "To serve the public best, Blue Shield Plans need and deserve the support of physicians and medical societies."

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Blue Shield in South Carolina led all plans its size in increase in membership in the last quarter of 1960. Almost ten percent of the population is covered by Blue Cross and about 191,000 by Blue Shield.

The continued increase in cost of hospitalization and increase in utilization still makes it difficult for Blue Cross to put aside enough surplus to meet its required 3%. In 1960 there was a decrease in admissions per thousand from 150 to 144. That is admirable, but offsetting that was an increased length of stay from 7.1 days per case to 7.4 days per case. These facts point out the need for constant vigilance on the part of every physician and also every medical service committee of every staff to assure that unnecessary admissions are kept to a minimum, and length of stay is reduced wherever possible.

It is interesting to note that the hue and cry over medical care of the aged has resulted in very few subscribers in this group. There are only 1876 subscribers now and most of these were admitted when there were no restrictions and when it was first offered. It is also interesting to note that Blue Cross received in premiums from this group a little over \$82,000.00 last year and spent somewhat over \$99,000.00. In other words the rate charged for Blue Cross was too low and an adjustment in rates is anticipated as being necessary in the near future.

At the last meeting of the Blue Shield Board it was pointed out that in deciding about whether a family is entitled to service benefits or not we should be tempered with the spirit of the principle rather than the actual wording. For example, if a surgeon charges \$200.00 for an operation ordinarily and, the service fee allows \$100.00 then, if the family's income is only \$100.00 or \$200.00 over a \$4,000.00 dividing line between service and indemnity, it would appear reasonable that the surgeon might charge \$125.00 or \$135.00 instead of the usual \$200.00. In other words, as most physicians always have done and still do, fees should be adjusted even where the service idea does not prevail. The medical profession is in the spotlight, every satisfied patient is to our credit, every disgruntled one a loud and loquacious detractor to the profession. By the same token, when members of a family borrow money to put a patient in a private room or pool their resources to pay for special duty nurses, the physician may charge his full fee even if the family income is below the dividing line. However, he would create a much better impression if he increased his fee only a little or perhaps none at all. In other words all physicians should exercise discretion when it comes to charges as well as fees.

# News

## CONWAY MEDICAL STAFF MAKES DONATION

The Board of Trustees of Conway Hospital has announced that the sale of the issue of debentures in the amount of \$125,000 has been completed.

The Trustees have also announced the receipt of a gift of \$22,000 from the doctors who are members of the Medical Staff.

The Conway Hospital has just received a letter from Kenneth B. Babcock, M. D., Director of the Joint Commission on Accreditation of Hospitals, announcing that it has received full accreditation of the commission for a period of three years.

## MEDICAL SOCIETY MET AT JACKSONBORO

A large group of doctors and their wives, all members of the Coastal Medical Society, met at Jacksonboro March 23. Officers for the coming year were elected.

Elected president for the coming year was Dr. Ford Rivers of Charleston. Dr. Gus Richards, also of Charleston was elected vice president and Dr. Warren S. Smith, of Walterboro, was elected secretary and treasurer.

The Union County Medical Society and the Staff of the Wallace Thomson Hospital met in a combined meeting at the Fairforest Hotel March 14.

During the meeting the Medical Society elected officers for the coming year. Those chosen were: President, Dr. John A. McLeod of Lockhart; Secretary and Treasurer, Dr. Palmer W. Fant.

Dr. P. K. Switzer, Jr., was named delegate to the South Carolina Medical Association's annual meeting to be held in Charleston in April. Dr. Harold P. Hope was named as alternate delegate.

## DR. R. S. SOLOMON

Dr. Robert S. Solomon, Moncks Corner physician, has been elected president of the Moncks Corner Chamber of Commerce for the 1961-62 year.

Others who will serve with him are Dr. P. E. Myers, another Moncks Corner physician, and H. Norman West, lawyer and member of the State House of Representatives. Dr. Myers will be the new vice-president and Mr. West will continue to serve as secretary-treasurer.

## DR. MAY NOMINATED TO BENNETTSVILLE COUNCIL SEAT

Dr. Charles R. May was nominated to City Council in a run-off primary at Bennettsville.

Dr. May polled 617 to 511.

## STATE NEEDS MORE DOCTORS, ADVISORY GROUP HEAD SAYS

"Student ranks must swell at the South Carolina Medical College in the next 10 years," A. L. M. Wiggins, chairman of the Governor's Advisory Committee on Higher Education, said.

"Already South Carolina is low in the ratio between doctors and population. In order to maintain and improve that ratio, we will have to increase the number of doctors we turn out," he continued. "Growth in population will require a comparable growth in the medical college."

Commenting that the college is working at capacity now, Mr. Wiggins said that the problems of physical facilities and land for expansion are not insurmountable, and that there are plans to increase classes at the college from 80 to 120 students, although not in the immediate future.

Mr. Wiggins said that he and his committee were very much impressed with the high quality of work at the college and the high standing its students have in the profession. The committee spent the entire morning touring the college, hospital and the nursing school.

Equally impressed with the nursing school, Mr. Wiggins said, "We can't forget that there is also a tremendous demand for nurses in the state."

Whether his committee's report will affect fiscal allocations to state educational institutions depends on whether the governor follows their advice, Mr. Wiggins said. "Our proposal will be accepted only so far as it is meritorious," he said.

The advisory committee was formed by the governor to study the demands which will be made on South Carolina colleges due to population growth in the next decade.

Composed of people familiar with the field and problems of education, the committee will advise the governor as to the wisest course in meeting these demands.

## WELL EARNED

Broad River area legislators have joined in proposing that the new bridge at Peak be named after Dr. Carroll A. Pinner. This Newberry County doctor served both sides of the river, keeping an automobile on each side and walking the trestle from one side of the river to the other.

We could imagine no better tribute to a life of service than to name this bridge for the country doctor who lived a life of service to the people of his community.

## **S. C. PHYSICIAN HEADS DRIVE AGAINST POLIO**

The American Medical Association has announced an all-out drive to stimulate state and county medical societies in a spring campaign to have people take Salk polio shots.

Dr. Julian P. Price of Florence, S. C., chairman of the AMA Board of Trustees, said 40 per cent of the nation's population has not yet been inoculated against polio. He added:

"Polio still remains a serious health menace and state and county medical societies will be urged to cooperate with the U. S. Public Health Service and the national foundation in getting more people to take their polio shots."

Price said the timing of the campaign is important so everyone can receive at least three polio shots before the summer polio season begins.

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## **HAMPTON COUNTY**

A mobile emergency team trained and equipped to give medical service to disaster victims will soon be formed in Hampton County.

The Hampton County Medical Society has adopted a resolution whereby they "accept the task of organizing and training personnel to make available emergency medical service to the citizens of their communities."

The resolution, prepared by the S. C. Civil Defense Agency, is the first step in the SCCDA's medical disaster plan for South Carolina. The ultimate objective of the CD Agency is to have medical support teams throughout the state.

After initial training and equipping is completed, the medical teams would be ready to move into any area where their services are needed.

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## **NEW CHARLESTON HEALTH DEPARTMENT HEAD IS APPROVED**

Dr. Malcolm U. Dantzler, assistant to retiring Health Department Director Dr. Leon Banov, has been recommended for the post by the director.

Dr. Banov said his assistant "is the only person eligible for the job."

The director plans to retire June 30 after a long career.

At a recent meeting, the County Board of Health approved Dr. Dantzler as Dr. Banov's successor.

Dr. Banov said his assistant has been carefully trained in the operation of the department during his years of service.

At the meeting of the board of health, the following resolution was adopted:

"While we accept Dr. Banov's intended retirement, we do so with full appreciation of a half century of dedicated service and outstanding achievement.

"We will continue to use his experience and wisdom in an advisory capacity as a consultant to the health department."

## **STATE SENATE PASSES RETIREMENT REVISION**

The State Senate has approved a measure which would allow Dr. Leon Banov to continue as health officer for Charleston County beyond the compulsory retirement age.

Dr. Banov has been health officer in Charleston for almost a half-century and has reached the compulsory retirement age of 72.

The 1961-62 general appropriations bill carries several other state and local officials in special sections who have passed the age maximum imposed by state statute.

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## **JOHNS HOPKINS ALUMNI HONOR DR. WEINBERG**

The Johns Hopkins Alumni Association of South Carolina presented a 50-year medal of honor to Dr. Milton Weinberg of Sumter on March 29.

Dean G. Wilson Shaffer of Johns Hopkins and O. P. Steinwald, director of alumni relations for the Baltimore institution addressed the meeting.

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## **RIDGE MEDICAL SOCIETY**

The Ridge Medical Society will organize a mobile emergency team to render aid to disaster victims of Edgefield and Saluda counties. This mobile unit will be composed of doctors of these counties that will be trained and equipped to give the fastest possible aid.

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## **DR. PERKINS**

Dr. Paul K. Perkins, who retired from active service as a Captain in the U. S. Navy on March 1, has joined The Springs Cotton Mills as Director of Industrial Medicine for the Gayle, Eureka and Springsteen plants in Chester.

Dr. Perkins was born in Pikeville, N. C., and is a graduate of the University of North Carolina and the Rush Medical School of the University of Chicago. He served his internship in the U. S. Naval Hospital in Washington, D. C.

Dr. Perkins is a Fellow of the American College of Surgeons, a Diplomate of the American Board of Surgery and a member of the Association of Military Surgeons.

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## **DOCTOR UTSEY MOVES OFFICE**

Dr. Robert D. Utsey has moved his office from 1202 "D" Ave., West Columbia, to 1115 Augusta St. His telephone number remains the same.

Henry E. Plenge, M. D. takes pleasure in announcing the association of Rupert E. Hodges, M. D. in the practice of Radiology at 157 Catawba.

Marjorie M. Mengedohlt, M. D. announces the opening of her office at 1164 Northbridge Drive, Northbridge Terrace, Charleston. Practice limited to pediatrics.



## DR. CLARK OPENS OFFICE

Dr. Serena Riser Clark has announced the opening of her office for the practice of General Medicine in the Medical Building, 23 Forest Lake Shopping Center, Columbia.

A native of Columbia, Dr. Clark received a bachelor of science degree from the Woman's College of the University of North Carolina. She attended the University of South Carolina for graduate study and in 1949 received the degree of M. D. from the Medical College of South Carolina. Following graduation she served an internship at the Columbia Hospital.

She has served as medical director for the outpatient clinic at Columbia Hospital, was college physician and a member of the faculty at Columbia College and has been a member of the staff of the South Carolina Tuberculosis Sanatorium at State Park. At the present time she is serving as medical consultant for the St. Michael and All Angels Episcopal Church kindergarten.

## Medical College News

Dr. Frederick E. Kredel has been made Professor of Clinical Surgery.

Dr. R. Randolph Bradham is now Acting Professor of Surgery.

On July 1, Dr. R. W. Hanckel will become full-time Professor of Otolaryngology.

## DR. LYNCH SPEAKS TO CANCER SOCIETY VOLUNTEERS

Dr. Kenneth Merrill Lynch, Chancellor of the Medical College of South Carolina, spoke to some 200 volunteers for the American Cancer Society from all parts of the state at the South Carolina Division's annual spring meeting. In 1957 Dr. Lynch was presented the citation and medallion of the division for his outstanding contribution in the field of cancer control; this award is the division's highest honor.

Dr. Lynch was presented by Dr. Thomas A. Pitts, chairman of the executive committee of the American Cancer Society's South Carolina division.

## The Doctors Young of Anderson Honored

Dr. Charles Henry Young and Dr. Anne A. Young, his wife, were honored in a full page article in the Anderson *Daily Mail* of March 2, 1961. The article, inscribed "Scroll of Honor," paid tribute to the Doctors Young, saying: "They are, we believe, possibly the outstanding husband-and-wife team of healers of the body and soul in the United States today."

Both Dr. Charles Henry Young and Dr. Anne Young have been staff members at Anderson Memorial Hospital since 1918. They also both are members of the Anderson County Medical Society, the South Carolina Medical Association, and the American Medical Association. Dr. Anne Young is a member of the American Association for Maternal and Infant Health,



Photo by E. S. Powell, S. C. State Board of Health

Dr. G. E. McDaniel, Director, Division of Disease Control, State Board of Health, was honored by the presentation of a bronze plaque from the South Carolina Entomological Society at its sixth annual meeting in Florence on March 23. In presenting this plaque to Dr. McDaniel, elected the Society's first honorary member in 1956, Mr. Norman Allen, President, said: "This plaque is being presented to you by the membership of the South Carolina Entomological Society, Inc. It is in recognition of your interest and foresight on the place of entomology in the activities of the State Board of Health. You have been aptly referred to as the 'Father of Medical Entomology' in South Carolina. It seems only fitting, therefore, that the Society recognize you for this outstanding contribution to its field of work."

the American Medical Women's Association, and the Pan-American Medical Women's Alliance. Dr. Henry Young also is a Fellow of the American College of Surgeons.

## DR. PAYNE IS NOW ASSOCIATED WITH DR. PITTS

Paul Eugene Payne, Jr., M. D., has begun the general practice of medicine in Columbia, in association with J. William Pitts, M. D.

Dr. Payne, whose office will be at 1400 Barnwell St., is the son of the late Dr. Paul Eugene Payne, well-known Columbia physician.

A native of Columbia, Dr. Payne is a graduate of Columbia High School. At the University of South Carolina he was elected to Phi Beta Kappa honorary scholastic fraternity and was graduated *eum laude* in 1952 with a Bachelor of Science Degree. While at the University he was active as a Boy Scout leader in Columbia. He was advisor to Explorer Posts 15 and 22. He was a member of Sigma Alpha Epsilon social fraternity, and Alpha Kappa Kappa honorary pre-medical fraternity at the University.

After graduation from the Medical College of South Carolina, where he was a member of Alpha Omega Alpha honorary society, he interned at the University of Pennsylvania Hospital, then entered the Navy as assistant medical officer at the Charleston Naval Base.

He later completed the Naval Flight Surgeons' School at Pensacola, Fla., and was assigned to Carrier Air Group 8 on the USS Forrestal for two and one-half years. Having terminated active duty in January of this year, he is now attached to the local Naval Reserve unit as assistant medical officer.

Dr. Payne is affiliated with the staff of the Columbia, Baptist, and Providence Hospitals, and is also associated medical director of Pine Lake Rest Home.

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#### **DR. T. G. ORR ANNOUNCES NEW OFFICE OPENING**

Dr. Theodosia Gailey Orr has announced the opening of her office at the Medical Building of Forest Lake Shopping Center for the private practice of obstetrics and gynecology. (Columbia)

A native of Columbia, Dr. Orr received the Bachelor of Science degree from the University of South Carolina in 1952. She received her medical degree in 1956 from the Medical College of South Carolina and, after graduation, served her internship at the Columbia Hospital. A three-year residency in obstetrics and gynecology was completed by Dr. Orr at the Columbia Hospital in June, 1960.

She is a Junior Fellow of the American College of Obstetrics and Gynecology.

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#### **AIR FORCE CALLS 250 NEW DOCTORS**

The Defense Department, for the first time in four years has called for a draft of doctors. It wants 250 to serve with the Air Force.

A Pentagon announcement said this is a special call "made necessary by the failure of this year's intern group to volunteer for active duty beginning in July 1961 in sufficient numbers to meet the requirements of the military medical service."

This is the first time since 1957 that the Defense Department has resorted to the draft to obtain doctors.

The action Monday was foreshadowed last November when the Defense Department said that there had been a drop in volunteers for medical reserve commissions.

At the time the Pentagon said that this might require Selective Service calls for as many as 650 physicians early this year. The military services have been successful until recently in bringing doctors into the military for two-year tours of active duty on a voluntary basis.

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#### **S. C. MEDICAL NEEDS STILL URGENT**

During the past 13 years nearly \$71 million dollars, of which over \$33.5 million was in the form of grant-in-aid funds under the Federal Hill-Burton Act, have been or are currently being spent in South Carolina.

The money is for 23 completely new hospitals, 66 hospital beds or adjunct facility additions, 29 main health centers, two additions to health centers, 58 auxiliary health centers, three nursing homes, eight nurses' residences, four nurses' residences and training schools, and two mental health clinics, Dr. G. S. T. Peebles, state health officer, said.

Administered by the hospital construction section of the State Board of Health, these projects have provided 4,802 additional beds as well as new and improved facilities for the diagnosis, treatment and care of patients and for the teaching and training of personnel in the medical field.

He added that along with this progress, however, there are unmet needs for medical facilities. The advisory council for the Hospital Construction Program has recommended on the basis of five mental beds per 1,000 population and an estimated state population of 2,346,000, that South Carolina needs an additional 9,618 beds for mental and retarded patients.

On the basis of three beds per 1,000 population, an additional 6,198 nursing home beds are needed. The State also needs eight rehabilitation centers.

Dr. Peebles said federal matching funds have been available for the construction of rehabilitation centers for the past four years, but due to the lack of eligible sponsoring agents these funds have been transferred to sister southern states.

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#### **NATIONAL COUNCIL SUPPORTS MEDICAL CARE MEASURE**

The rapidly rising costs of health care and insurance prompted the General Board of the National Council of Churches to support legislation which would aid low income families and those 65 and over who cannot afford voluntary health insurance. While supporting extended benefits under the Old Age, Survivors' and Disability Insurance, and recommending that full advantage be taken of the recent amendment to Title I of the Social Security Act, the Board suggested no specific legislation.

The fact that only 35 per cent of those 65 and over have any health insurance at all and that 80 per cent of them have annual income of less than \$2,000 a year was cited in the pronouncement as a major reason for increased assistance.

Stating that government participation in welfare programs does not necessarily involve loss of individual freedom or an affront to personal dignity, the Board noted "the Christian obligation to include provisions of the administration (of such a government program) that will adequately safeguard freedom, dignity and self-respect."

The General Board also expressed its confidence in the cooperation of the medical profession and health agencies both in planning and executing comprehensive health program for the aged and needy in the nation.

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#### **South Carolina Heart Association**

Albert R. Simonds, first vice president of the Citizens and Southern National Bank of South Carolina, has been elected president of the South Carolina Heart Association for 1961-62. He succeeds Dr. R. Cathcart Smith of Conway, who was presented the Distinguished Service Award.

Other officers named were Dr. C. Warren Irvine,



Jr., Columbia, vice president; Dr. Allen B. Warren, Jr., Spartanburg, secretary; O. Wilson Farrell, Columbia, treasurer; Dr. R. Cathcart Smith, chairman of the board of directors, and Robert C. Burton, Columbia, executive director of the association.

Elected to the board of directors for a three-year term were Dr. C. Ford Rivers of Charleston, Dr. A. Izard Josey of Columbia, Dr. R. Brooks Scurry of Greenwood, Dr. N. B. Baroody of Florence, Dr. Edward F. Parker of Charleston, Robert N. Jones of Rock Hill, John L. M. Tobias of Columbia, Stathy J. Verenes of Aiken, Albert F. Heinsohn of Charleston and Mr. Albert R. Simonds.

Dr. Philip E. Assey of Georgetown was presented a Meritorious Service Award.

### THE NATIONAL SOCIETY FOR CRIPPLED CHILDREN AND ADULTS

CHICAGO — Dr. Benjamin Spock, noted pediatrician, has joined the expanding list of outstanding writers who are contributing to the Parent Series of pamphlets published by the National Society for Crippled Children and Adults.

His "On Being a Parent—of a Handicapped Child" has just been released and is the eighth in the series of booklets designed to give practical aid and helpful guidance to parents toward meeting the needs of their crippled child with better understanding.

Professor of Child Development at Western Reserve Medical School in Cleveland, Dr. Spock is internationally known and has literally been the world's baby doctor for many years. His most famous book "Baby and Child Care" has been published in numerous editions and in many languages and has long been one of the top best sellers in the parent guidance field.

In "On Being a Parent — of a Handicapped Child" Dr. Spock emphasizes that crippled children range all up and down the scale of human behavior—just like children without handicaps.

"All mothers and fathers can learn something from the problems faced by parents of retarded and handicapped children," Dr. Spock says. "That's because no child is perfect, and we all react to imperfection in our offspring in somewhat similar patterns. But it is much easier for us to see and understand the reactions to such disappointments when the handicaps are severe than when they are mild."

The basic strength and resourcefulness of parents really count when the shock of discovery of a handicapping condition in their child wears off and as parents they settle down to live with the situation. "It is much the same whether there is a handicap in the usual sense, or whether the problem is marital or financial or one of delinquency," Dr. Spock says. "This is the stage where the difficulty is either coped with or left unsolved."

The way parents view their child is primarily the only way he can acquire his sense of himself. "Whether they consider him weak or husky, attractive or unappealing, good or bad, pathetic or terrific, he will tend—other things being equal—to accept their view," says Dr. Spock. If the parents can act as if the handicapped child were a regular child except for the defect, love him, enjoy him, expect his best efforts, require his cooperation, punish him when punishment is due, feel no great embarrassment about him, others will accept him on the same basis, he points out.

In carrying through on his subject, Dr. Spock discusses many vital points applicable to all parents. He urges wise counseling on child development problems and sees in groups established by parents themselves a valuable meeting ground where they can share common problems, learn from one another's solutions, feel they are no longer alone.

Copies of "On Being a Parent — of a Handicapped Child" can only be obtained through the Publications Service, National Society for Crippled Children and Adults, 2023 West Ogden Avenue, Chicago 12, Ill. The per copy cost is 25 cents.

## Announcements

### The Evaluation Clinic for Mentally Retarded Children

1515 Bull Street  
Columbia, South Carolina

Hilla Sheriff, M. D.  
Administrator

E. Kenneth Aycock, M. D.  
Clinic Director

Clinic Opening Date: April 15, 1961

The Evaluation Clinic for Mentally Retarded Children is set up for the purpose of comprehensive diagnostic study and evaluation of the child whose de-

velopment reflects some degree of mental retardation. The clinic is administered by the Maternal and Child Health Division of the South Carolina State Board of Health.

Services offered are:

Evaluation of physical, psychological and social factors.

Parent counseling and casework services.

Appropriate referral and follow-up.

Periodic review of the child.

Consultation with professional persons, agencies, parent groups, and interested individuals.

Assistance with in-service training programs.

Services of the clinic are available at no cost to the



family. When financially able, the family will be expected to pay for extra clinical services and consultations which are indicated.

**Personnel:** The clinic staff includes a pediatrician, medical social worker, public health nurse, psychologist, and secretary. Consultation from the staff of the Maternal and Child Health Division of the South Carolina State Board of Health is available.

**Referrals:** Any child, living in South Carolina, under seven (7) years of age, thought to be slow in mental development, may be referred. Referrals must be made by a physician either in private practice or by the county health officer, on a prescribed form. These forms may be obtained from the local county health department or from the clinic. The completed referral should be mailed to the Evaluation Clinic for Mentally Retarded Children, 1515 Bull Street, Columbia, S. C.

The 3rd World Congress of the International Federation of Gynaecology and Obstetrics will be held in Vienna from September 3 to 9, 1961.

## TRUDEAU SCHOOL OF TUBERCULOSIS and OTHER PULMONARY DISEASES

Forty-sixth Session  
1961

The Trudeau School of Tuberculosis and Other Pulmonary Diseases, which will hold its Forty-sixth Session in Saranac Lake, N. Y. from June 5th to 23rd, 1961, continues to provide a unique opportunity for training in the field of chest diseases. This annual postgraduate course for physicians, conducted under the auspices of the Trudeau Foundation and supported by the Hyde Foundation, is able to provide outstanding instruction at a minimal tuition of \$100.00 for a three weeks session.

Inquiries should be addressed to the Secretary, Trudeau School of Tuberculosis and Other Pulmonary Diseases, Box 670, Saranac Lake, N. Y.

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## PAP FOR SENIOR CITIZENS

Forrest Davis

. . . According to expectations, the Conference on Aging followed the immutable law of all such benevolent gatherings. Its mood, although no general vote was taken, embraced the thesis of President Kennedy, organized labor, the Left in all its shadings, the social science faculties and the President's task force headed by Prof. Wilbur Cohen of the University of Michigan. That thesis being, however it strains your credulity, that all persons 65 years old or over, rich, well-off or poor, employed, practicing professions or trades, running businesses or farms, or disabled, are to become the beneficiaries of subsidies extracted from workers and their employers to pay the expenses incident to illness.

The fact that a majority of "senior citizens," probably quite sizable, has no need of such a handout, to which none will contribute, does not weigh with the Wilbur Cohens. Nor does the estimate that two million of the elderly, perhaps those with the highest incidence of indigence, are uncovered by social security.

Nor did the conference consider the almost certain politico-economic consequences of these unearned grants-in-aid. For "senior citizens" are not the only Americans who find it difficult to meet medical expenses. If the worker is to bestow these benefits involuntarily upon the aged, why not look out for himself by tapping the same till? It stands to reason, doesn't it? Why not take another whack at the worker's dollar to provide all social security enrollees money for the doctors' bills?

The sensible and considerate individual's objections to the tenor of the Conference on Aging and the

President's determination to push this scatter-gun solution through Congress are not based alone on the vista of ever-wider welfarism, the intimations of socialized medicine and the matter of equity involved in directly taxing the many for the benefit of the few. If ever a great public policy was arrived at in the dark this is it. There exist no trustworthy statistics as to the human need with which it purports to deal. We know from census reports that there are some 16.5 million Americans 65 or older. How many are at work, full-or part-time; how many have sufficient funds, how many are pensioned or enjoying annuities, how many cared for by willing and able relatives, how many have health insurance—all these highly relevant breakdowns are undisclosed.

Two impressions could be derived from the conference proceedings. The first, that those Americans 65 and older are prevailingly an undifferentiated parcel of derelicts, living meanly, racked by aches and pains not now alleviated, yet far too proud to apply for what one speaker denounced, amid cheers, as "charity medicine." He was deploring the means test written into the health bill for the aged passed by the last Congress. Yet "charity medicine" is as old as medicine. The first hospitals in the West were established for the poor by charitable foundations. But in the "age of modulation," no American can be expected to endure the "humiliation" of admitting that he cannot pay for getting well out of his private purse although he can accept without qualm the money of other people after it passes through the hands of the publican.

The second impression is one of rather gross con-

descension for fellow citizens who have passed their 65th milestone. Underlying it all was the tacit assumption that Americans full of years and experience have lost their capacity for choice. Henceforth they may be expected to become wards of the Federal Government, their habitats built to bureaucratic taste, recreation worked out by formula, diet regulated, all

to the end that, as a silly "bill of rights" issuing from one panel put it, they may "die with dignity." The next step for "senior citizens" is to colonize them on reservations and, after that, perhaps euthanasia.

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### **Statement by The State Board of Health Regarding The Arden House Conference on Tuberculosis as it Relates to South Carolina**

It appears proper that some background information be presented on tuberculosis control in this State before entering into a discussion of the recommendations of the Arden House Conference which took place in Harriman, New York, November 29 - December 2, 1959.

In 1945 the Section of Tuberculosis Control was established in the South Carolina State Board of Health. Because of the complexity of the problem, it was and is still realized that the solution of the tuberculosis problem cannot be the sole responsibility of that Section. Among those concerned with the various aspects of tuberculosis control are the physicians, sanatoria, local health departments, nurses, and the voluntary health organizations. Essentially, the role of the Section of Tuberculosis Control is to provide leadership in bringing these forces together and contribute what it can through the use of available public funds and personnel.

Specifically the program of the Section of Tuberculosis Control consists of the following:

1. Reporting and registration of cases
2. Case finding
3. Case and contact follow-up
4. Provision of out-patient treatment services
5. Medical, nursing and social consultative services
6. Distribution of old tuberculin upon request to private physicians and local health departments
7. Furnishing sputum bottles and mailing containers to physicians and local health departments for submitting specimens to the Division of Laboratories for examination for tubercle bacilli

Obviously the tuberculosis problem cannot be successfully attacked unless one has information concerning the identity, location, and pathological type of cases which constitute the problem. Physicians, clinics, hospitals, sanatoria, etc., report their tuberculosis cases to the Section of Tuberculosis Control.

Each county health department is furnished tuberculosis register cards along with a suitable filing container. This register card is of the veri-visible type and makes easily available the information which may be contained in a number of scattered and uncoordinated records. A system of marginal signals provides for the signaling of any desired pertinent information. By keeping the registers current the size of the tuberculosis problem is reflected at all times.

What then is the tuberculosis situation in South

Carolina in 1961? Tuberculosis in 1961 bears little resemblance to the disease we knew ten to twenty years ago. The epidemiology of the disease, case-finding techniques, methods and results of treatment—everything but the fact that infection with mycobacterium tuberculosis is a prerequisite for the disease—seem different.

There are 6,907 known cases of tuberculosis under supervision. Of these, 1,099 whites and 1,251 Negroes or a total of 2,350 individuals have active disease. Of the active cases 1,075 are hospitalized, and there are 1,113 active pulmonary cases at home. Of the active cases at home 453 have negative sputum, 104 have positive sputum and 556 have not had a sputum examination during the year. Seventy-one of the patients at home who have positive sputum are AWOL or have disciplinary discharges from hospitals; however, 40 of these AWOL patients are receiving chemotherapy at home but the remaining 31 are genuinely recalcitrant, refusing any type of treatment. An additional 33 patients with positive sputum are receiving out-patient chemotherapy, most of whom have received Maximum Hospital Benefit and have refused surgical treatment offered by the hospitals.

Proper supervision of active tuberculosis cases at home cannot be carried out unless the sputum status of the patient is known. Most of the active cases at home have had chest x-ray films in the clinics but this is no excuse for not doing sputum examinations on these patients. Certainly no patient with active pulmonary tuberculosis should be allowed to go a year without sputum examination. This is one phase of the program that certainly needs correction.

The State Board of Health has requested funds from the United States Public Health Service to employ two nurses to visit the chest clinics and county health departments in order to keep them more interested in carrying out routine sputum examinations on all active cases under their supervision.

At our last count, 939 patients with pulmonary tuberculosis are receiving out-patient treatment in the chest clinics.

The death rate has shown considerable decline in South Carolina. In 1955 there were 228 deaths from tuberculosis; the death rate was 9.8 per 100,000 population (5.7 for whites; 16.2 for Negroes). In 1959 a total of 157 deaths was reported (96 Negroes and 61 whites). The 1959 death rate for whites was 4.1 per 100,000 population; the death rate for Negroes was 9.9 per 100,000 which gave us an over-all state tuberculosis death rate of 6.4.



It may be of interest that during the year 224 patients with active tuberculosis left the sanatorium or hospital against medical advice. White males led with 126, Negro males, 65; white females, 17; and 16 Negro females. There are numerous and varied reasons given for these discharges; among them the lack of proper preparation of the patient before entering the hospital for a period of separation from his family and loved ones. Social, emotional, and economic factors certainly entered into the picture in some instances. Also, the lack of understanding of the patient's problem by the nursing and medical personnel in the tuberculosis hospital played, maybe, a small but important part in some patients' leaving against medical advice.

There are case finding and follow-up facilities which include the local chest clinics, the State and County Tuberculosis Hospitals in all counties of the state but because of the decreasing incidence of tuberculosis the case finding activities are becoming more and more selective. Comparison of figures during the last five years shows a decline in the incidence of tuberculosis in South Carolina. In 1955 there were 1,218 new cases reported (925 of which were active). Last year a total of 1,007 new cases (728 of which were active) was reported. This shows an over-all decline of 17.3 per cent in the number of new tuberculosis cases reported and a 21 per cent decrease in the number of new active cases reported during the five-year period. The incidence of tuberculosis has been consistently higher in males in the five-year period, that is, for every 100 new cases of tuberculosis reported 62 were in males and 38 in females. Also, during this period the incidence of tuberculosis in Negroes has been consistently higher as compared with whites. Last year there were 477 new cases reported in whites and 530 in Negroes. This differential is more significant when one realizes that only 38 per cent of the population of South Carolina is Negro.

However, pulmonary tuberculosis is a disease of the human race and is present among all ages, races, and in all strata of society. A high index of suspicion of tuberculosis is of great value to the physician when he confronts a patient with chest complaints and particularly when the patient is an elderly individual who may present a ready-made diagnosis. The diagnoses of asthma, bronchitis, bronchiectasis, virus pneumonia, emphysema or cigarette cough may not only hide a multitude of sins but millions of tubercle bacilli. It may be that the presence of tuberculosis can be ruled out or confirmed only by a careful history, physical examination, tuberculin skin tests, x-ray studies, and repeated laboratory studies. It is well to remember the high incidence in tuberculosis contacts, uncontrolled diabetics, patients with gastric resection, chronic alcoholics, psychotics, and silicotics. X-ray examination of these groups of persons who have a predisposition to tuberculosis has been emphasized in the case finding program, and through this emphasis, the true incidence of tuberculosis in South Carolina is better reflected. In short, selective case finding, we believe, is "paying off" in this State. Incidentally, of the new

cases reported last year, only 3 per cent were reported by death certificate and were unknown by the official health agency prior to death.

The World Health Organization considers that tuberculosis will cease to be a major public health problem when no more than 1% of the 14 year old children in a community are reactors to tuberculin. Selective tuberculin testing in this State indicates that about 6% of children 14 years of age have positive tuberculin tests.

In general, the State Board of Health agrees that the Arden House deliberations on tuberculosis control indicate a shift in emphasis as follows:

In the past, the goal of tuberculosis control had to be the "containment of the disease in the hope that the reduction of tuberculosis morbidity and mortality would in itself, in time, produce the death of the disease.

For the future it is conceived that our goal should and must now be total eradication of the tuberculous infection and the tubercle bacillus itself.

If we accept, in its entirety, this changed concept of tuberculosis control, we must expand and in some instances modify our use of tools of detection and treatment presently available to us. A plan of attack must be formulated which will use available funds and personnel time in a way to produce the best results. As parts of the tuberculosis control program, the following general subjects were reviewed by the State Board of Health:

#### *TUBERCULOSIS CASEFINDING*

The periodic clearance of all county tuberculosis case registers must be considered to be a routine matter. Statistical information most valuable in predicting the trend of tuberculosis in each county of the State can be obtained from the local case registers if they are utilized properly.

The present individual record of tuberculin sensitivity which is supplied by the Section of Tuberculosis Control to the county health departments and chest clinics will be made available to private physicians requesting same. The availability of Old Tuberculin from the State Board of Health to private physicians upon request must be better publicized.

The early and meticulous follow-up of *ALL CONTACTS TO ANY TYPE OF TUBERCULOSIS SOURCE IS ESSENTIAL*. It is obvious that our efforts in detecting cases of tuberculosis are somewhat wasted if we do not follow through completely in the follow-up of *ALL* contacts. Local health departments must continue supervision of post-treatment cases as long as necessary and when the patient's tuberculosis has been inactive for five years the patient should be sent annual reminders of the necessity of recheck examinations.

Private physicians are encouraged to carry out intracutaneous tuberculin testing of their patients, with careful follow-up of positive reactors and recent converters. Infants and pre-school children attending well-baby clinics should be tuberculin tested and the source case of the positive reactors must be located.



All contacts 16 years of age and under of known cases of tuberculosis or of persons dying from tuberculosis who were not previously reported as tuberculosis cases should be tuberculin tested and the positive reactors examined by x-ray. Contacts over 16 years of age can have x-ray examination without preliminary tuberculin testing.

The two mobile photofluorographic units currently operated by the Section of Tuberculosis Control for the detection of unsuspected cases of tuberculosis in the apparently well population should be continued. The present yield of 1.1 unknown active cases per 1000 examinations through selective population surveying continues to make this procedure worth-while.

#### CLINIC FACILITIES

We feel that local clinic facilities for tuberculosis detection, for the treatment of patients, for the follow-up of cases and contacts, and for health education can be strengthened, particularly in the area of providing better out-patient treatment. By improvement of the caliber of the chest clinics with the present availability of the out-patient services of the tuberculosis hospitals, additional consultative services will be provided to private physicians.

The follow-up of known cases should continue for a minimum of five years, preferably longer.

The initial and subsequent follow-up examinations should include a physical examination, chest x-ray film and bacteriologic examination of each patient. With few exceptions, the clinicians conducting the chest clinics are inclined to place too much emphasis on the interpretation of a chest film and too little time in talking with and examining the patient. Further, too little thought is given to the necessity of frequent examination of the patient's sputum for tubercle bacilli. The above triad must be followed in all chest clinics in order to prevent errors in diagnosis and classification of the activity of the tuberculous patient.

#### HOSPITALIZATION

The State Board of Health agrees with the concept that a period of hospitalization, beginning as soon as a diagnosis of active tuberculosis is established, provides the best circumstances for the recovery of the patient. The patient should continue hospitalization until the disease is inactive (about 9 months in the majority of cases), or, at least until the patient is no longer infectious (not more than six months in most cases). It goes without saying that improvements in the out-patient chest clinics for continuity of treatment and care will be conducive to earlier discharge from the sanatoria. Nevertheless, it must be pointed out that clinic physicians treating patients on an out-patient basis must be able to have patients who are not responding to treatment or are in need of surgical treatment readily readmitted to the hospital or sanatorium.

There must be prompt notification by the tuberculosis hospitals to the local health department in the county in which the patient resides when the patient leaves, whether he receives a regular discharge or discharge against advice. Also, each tuberculosis hospital

must furnish a free supply of anti-tuberculous drugs to each patient discharged regardless of the type of discharge, if such treatment is medically indicated. The supply of drugs must be adequate to treat the patient until arrangements can be made to care for him as an out-patient or until he can be re-admitted to the tuberculosis hospital.

A small percentage of patients with active tuberculosis are genuinely recalcitrant and will not cooperate with any recommended course of treatment. For these, forcible isolation is mandatory. The present commitment law is adequate but facilities at the State Sanatorium are lacking for keeping these patients. Locked wards must be provided for restraining these individuals to insure adequate treatment and protection of the community.

#### LABORATORY SERVICES

The State Board of Health Laboratory examines every sputum and body fluid submitted by chest clinics or private physicians by both microscopic smear and culture. With the increasing number of cases of pulmonary disease due to atypical acid-fast organisms being seen in South Carolina, no examination is complete until the specimen is cultured. When indicated and requested drug susceptibility tests can be better performed in private, hospital or sanatorium laboratories where they are presently being carried out and where the proper clinical selection of cases requiring sensitivity tests can be made.

#### CHEMOTHERAPY

The major recommendation of the Arden House Conference is a widespread application of chemotherapy as a public health measure for the elimination of tuberculosis in the United States.

Technique: Mobilize all resources for a widespread application of the scientifically demonstrated and medically accepted procedures of adequate chemotherapy. These include the proper dosage of appropriate drugs or combinations of drugs given continuously over an adequate period of time—procedures that are known to destroy tubercle bacilli in the human body, render the patient's disease non-communicable to others, and minimize the possibility of reactivation.

*All patients with active tuberculosis must be placed under treatment regardless of their residence, whether recalcitrant or not.* The selection of the drugs used in combined therapy should be left to the discretion of the attending physician or local chest clinic. However, for the official health agency to expand out-patient chemotherapy, increased state and local tax funds must be made available to purchase anti-tuberculosis drugs. Children under the age of three, who develop a positive tuberculin reaction, should have prophylactic chemotherapy, usually INH alone in the dosage of 5 mg. per kilogram of body weight per day for one year. This recommendation is made because of the accepted realization of the danger of hematogenous tuberculosis in tuberculin positive infants and young children.

Chemotherapy should be given, under the direction of a physician, to an individual of any age with a

positive tuberculin reaction who has a newly discovered lung lesion which is considered to be due to active tuberculosis, either in a hospital, or an ambulatory basis where adequate justification for hospitalization does not exist. Also, chemotherapy should be considered by the chest clinic or private physician for any tuberculin reactor who has a newly discovered lung lesion of probable tuberculous etiology, but not proved to be active. In the latter patient, careful historical, clinical and laboratory examinations must be carried out to rule out carcinoma of the lung or other disease as the cause for the pulmonary pathology.

The question of prophylactic chemotherapy for an individual over three years of age who is known to have converted his or her tuberculin skin test reaction

during the past year must be left to the discretion of the chest clinic or the patient's physician.

To make chemotherapy and the other services available as outlined in these recommendations, whole-hearted support of the medical, nursing and other professions as well as the sanatoria, the South Carolina Tuberculosis Association and other voluntary associations with the State Board of Health and local health departments who are legally responsible for the control of tuberculosis, is imperative.

With the cooperation, interest and enthusiasm of all groups and individuals the suggested tuberculosis target point (no more than 1% of 14 year old children are reactors to tuberculin) possibly can be reached in South Carolina within the next ten years.

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## Book Reviews

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*THE MODERN TREATMENT OF ASTHMA, WITH SPECIAL REFERENCE TO GOLD THERAPY.* L. Banzsky, M. D. Second edition, John Wright and Sons, LTD. Bristol, 1959. The Williams and Wilkins Co., Baltimore, exclusive U. S. Agents, \$5.00.

This small volume is a review of much of the current knowledge of bronchial asthma including a discussion of theories as to etiology, the allergic aspects, the relationship of histamine, the autonomic nervous system, and endocrinologic influences. A chapter on symptomatic treatment includes comments on many of the currently used medications. Much of the book is devoted to discussion of the association of tuberculosis with asthma and to the use of gold compounds in treatment. According to the author's concepts, "—allergy in asthmatics is only a secondary state due to tuberculinization (non-active tuberculosis),—". "Unless the root condition—the tuberculinization of the organism—is remedied and the deficient adrenocortical function corrected, a permanent improvement cannot be expected. I believe this can be achieved by the use of gold in asthma." Dosage, indications, routine, and duration of treatment with gold as well as the author's results with gold therapy are included. Though there are a number of supporting references for his position with regard to tuberculosis and asthma, it is to be noted that most of these references are publications in the first quarter of the century. Present concepts of the etiology of asthma are not in agreement with this thinking. It would appear that there is little to support the thought that asthma is related in etiology to tuberculosis. Though gold compounds have enjoyed limited popularity in rheumatoid arthritis, experience in asthma has apparently been quite small. The basis of any effect produced is certainly not clear, and though the reported results appear impressive, until further evaluation and observations under controlled circumstances have been carried out,

conclusions as to its effectiveness should be withheld. While portions of this book present much of the current knowledge on bronchial asthma, the author's emphasis on a theoretical and unproven etiologic and therapeutic approach would seem to limit its use considerably.

Kelly McKee, M. D.

*PHARMACOLOGY: The Nature, Action and Use of Drugs*, by Harry Beckman, M. D., 2nd Ed. W. B. Saunders Company, Philadelphia and London. 1961. 805 pp.

This is a significant and valuable addition to the sources of information on current drug therapy. Dr. Beckman has a long and successful record in the preparation of books which evaluate drug therapy in terms of the practitioner's viewpoint. His extensive experience in evaluating past therapies has added perspective to this thorough treatment of current drug topics. This treatment is, in fact, about as up-to-date as the mechanics of book manufacture will permit. Journal references on which the discussions are based are all recent and well selected. Structural chemical formulae are numerous and are illustrated with unusual clarity. They are presented in such way that the student or physician with the usual experience in organic chemistry can recognize the basic similarity which exists in some of the common drug groups. The organization of the material is broadly along the lines of therapeutic classifications and diverse types of information can be readily located. Useful aids include a table of the 100 most used drugs with their principal pharmacologic actions, therapy and most serious undesirable reaction. This volume is certainly a highly readable treatment of up-to-date drug therapy.

R. P. Walton, M. D.



*FROM MIDNIGHT TO DAYBREAK.* Jack C. Norris, M. D. Atlanta, 1960. (Privately Printed)

Finding himself a sufferer from insomnia, Dr. Norris, once a Charlestonian, now an Atlanta pathologist, and alumnus extraordinary of The Medical College of South Carolina, decided to put his sleepless hours to good use by writing a miscellany of autobiographical, philosophical, historical, and medical articles which have been gathered together in a small book. As a recipient of a copy, this editor has derived enjoyment from reading the 65 page volume. It is likely that other readers will enjoy the same experience.

JJW

*NEW AND NONOFFICIAL DRUGS, 1961.* J. B. Lippincott Co., Philadelphia, 1961. Price \$4.00.

The Council on Drugs of the American Medical Association has produced a new edition of the old standby. This volume gives a sound critical review of the many new drugs available and serves to clarify any concepts which have been muddled by high pressure of their own products by some of the pharmaceutical companies. It is a book to be used frequently and with confidence, and to much better effect than some of the handbooks which are published without the rigid critical approach which this book enjoys.

JJW

*CELLULAR ASPECTS OF IMMUNITY*, edited by G. E. W. Wolstenholme and Cecilia M. O'Connor. Little, Brown and Co., Boston. 1960 Pp. 495. Price \$10.00.

This symposium on the cellular aspects of immunity shows that the immunologically competent cell, rather than the antibody, has become the central theme of immunology. The participants in this symposium presented material on the population dynamics of mesenchymal cells as they are modified and influenced by immunological processes.

Another step forward in this field, as a result of this symposium, was the clarification of terminology. Throughout the papers and the discussions each member was careful to use the terms as initially defined or if needful to carefully define his terms, usually by reference to earlier works. Agreement was established on some points such as the plasma cells being the producers of classical antibodies as well as the fact that the immunologically competent mesenchymal cells may have any one of at least three morphological appearances, namely lymphocyte, histocyte and plasma cell. In the more controversial fields the important questions are being put a little more clearly than in the past.

J. Heyward Wynn, Jr.

*BLOOD DISEASES OF INFANCY AND CHILDHOOD.* By Carl H. Smith, M. D. 572 pages. C. V. Mosby Company, 1960. Price \$17.00.

The publication of a text devoted to the pediatric aspects of hematology fulfills a definite need, as

shown by this excellent work of Dr. Smith. Since many blood diseases are particularly limited to childhood, their interpretation is dependent on the understanding of the normal variants to be found, and these are thoroughly covered.

The many problems related to the maternal-fetal circulation are discussed and treatment concisely and completely presented for diseases such as erythroblastosis foetalis. The differential diagnosis of jaundice, including hematological and non-hematological causes, is ably presented and the pathogenesis reviewed. Congenital forms of hypoplastic anemias, myoblastic anemias of infancy, and the hereditary hemoglobinopathies peculiar to childhood comprise a large portion of the section on the anemias. The discussion of diseases of the reticuloendothelial system and abnormalities of the myeloid series is brief but has an adequate bibliography. Hemorrhagic disorders are well covered and the techniques and interpretation of tests for their elucidation add greatly to the understanding of the student.

This text can be highly recommended to all students and pediatricians, as well as those in other fields interested in hematology.

Charlton deSaussure, M. D.

*THE OUT-PATIENT TREATMENT OF SCHIZOPHRENIA*, A Symposium, edited by Samuel C. Scher, Ph.D., and Howard R. Davis, Ph.D. Grune & Stratton, Inc., New York, 1960. Pp. 256. Price \$5.75.

"The Out-patient Treatment of Schizophrenia", presents, in symposium form, outstanding contributions by acknowledged authorities in the field. Among these participants are such well known contributors to the professional literature as Silvano Arieti and Nathan W. Ackerman.

The subject matter included embraces such areas as etiology, concepts, treatment, special techniques, factors in professional staff morale, therapeutic interaction among patients and their families and the community at large and research.

Following the presentations, there is a discussion where agreement and points of disparity in thinking are presented. This affords an interesting opportunity to have the participants' divergent thinking on a given subject, and it points up the need for considerable research.

One of the interesting points made is that psychoanalysis should be looked upon not only as a therapeutic, but also as a research tool.

Problems in the area of research are considered and the need for agreed upon objective standards are cited. The need for better integration of services is an area given consideration and an all-out approach of professional and political and community leaders is advocated.

Although much of the thinking presented in this volume is the same package presented with a slightly different wrapping, it is good to have this contribution.

(Continued on page 250)





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SEARLE

(Continued from page 248)

tion from such a variety of outstanding leaders in the field and it should serve as a welcomed contribution to the ever growing body of professional literature on the treatment of schizophrenia.

Sol B. McLendon, M. D.

*IT'S CHEAPER TO DIE*° by William Michelfelder. Published by George Braziller, New York, 1960.

The author is a former reporter and editor for Hearst and Scripps Howard papers. He has been given the A. F. L. - C. I. O. award for Public Service in the field of medical costs. He has published two novels—the more recent one—"Be Not Angry." The book consists primarily of a series of charges against the American Medical Association and the manufacturing drug industry, stating that some of their business practices are unprincipled and motivated by a desire for monetary gain.

Typical of the charges are that the American Medical Association dictates the business aspect of the practice of medicine down to the hospitals and individual physicians, that the referral of patients is commonly accompanied by fee splitting, that Blue Cross exists primarily for the benefit of hospitals and that Blue Shield is commonly used as a means of hiking professional fees.

The author is strongly opposed to the "fee for service" method of charging. He advocates what he terms "comprehensive medical care". In such a system there is the introduction of a third party and the physicians are on a salary basis. The Health Insurance Plan of New York and the Kaiser System of Hospitals on the West Coast are given as examples of a satisfactory solution to the economic problems of medical care.

The book is written in a plausible sensational style

with tear jerking dramatization of specific incidents. While many of the arguments are facetious and supported by half truths, there is sufficient foundation in fact to give cause for concern to the physician who has a sense of public and professional responsibility. It is an excellent compilation of charges made against the present practice of medicine by certain "liberal" segments of the population in magazine articles and on the air.

This book should be read by physicians so that they may be aware of the nature of these charges, and can correct abuses where they exist and refute charges which are false.

°Sub-title to book—Doctors, Drugs and the A.M.A.  
William H. Prioleau, M. D.

*A TRAVELLER'S GUIDE TO GOOD HEALTH.*  
Colter Rule, M. D. Doubleday & Company, Inc., Garden City, 1960. Price \$3.95.

This is a pleasingly constructed work for the traveller of all categories, and is an effort to instruct the tourist in acceptable ways of avoiding minor ailments which are likely to occur during an extended trip. Essentially these ailments are the same to which one might be subject at home, but the author goes into those aspects which are particularly applicable in travelling. He describes the necessary immunizations, kind of clothing, first aid equipment, basic medicines, and concludes with a very worthwhile chapter on the psychology of travel. A glossary gives translations of common sentences or phrases which might be useful in giving a history of any ailment to the foreign physician who does not speak English.

This book would seem to be a very useful reference book for the person who is about to join the millions who travel from America.

JWV

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### TRAUMATIC RUPTURE OF THE BRONCHUS

#### A CASE REPORT

MOREY LIPTON, M. D.

*Instructor in Surgery, Department of Surgery, Medical College of South Carolina, Charleston, S. C.*

BERNARD E. FERRARA, M. D.

*Associate in Surgery, Medical College of South Carolina, Charleston, S. C.*

#### *Introduction*

**T**raumatic rupture of the bronchus occurs rarely; and it is recognized infrequently.

In 1947, Kinsella and Johnsrud<sup>1</sup> collected 38 cases of rupture of the bronchus from the literature and reported two cases of their own. There were few correct clinical diagnoses, and primary repair was not attempted until 1947. Few patients survived bronchial rupture and most of those who did, developed bronchial strictures which required resection. Since 1947, with consistent improvement of anesthetic and surgical techniques, primary repair of this injury has become the treatment of choice. Considerable difficulty in diagnosis persists. This point was emphasized by Hood and Sloan<sup>2</sup> in their review of 91 cases. Their report was concerned with the interval of time between the onset of injury and diagnosis. In only 30 of the 91 cases was the diagnosis established in the first 24 hours. Eight additional patients were diagnosed by the end of seven days, and fifteen others were recognized at the end of a month. In 37 cases, the time elapsing before diagnosis was established, varied from one month to 19 years. Mahaffey and his associates<sup>3</sup> demonstrated that good pulmonary function could be restored after rupture of a bronchus, even for periods as long as 12 years.

Compression or crushing injuries to the chest should alert the physician as to the possibility of major bronchial rupture. Major bronchial rupture is suggested in the patient with pneumothorax, who fails to re-expand with an intra-pleural catheter, and in whom a large inexhaustible air leak exists. An individual with massive or rapidly advancing mediastinal and subcutaneous emphysema should be observed closely. A case is described in which the etiology of persistent pneumothorax, even after adequate pleural drainage, was not determined until operation 48 hours after admission. Serial x-ray studies are of invaluable aid in determining the progression or improvement of pneumothorax and also the development of atelectasis which usually occurs distal to the rupture of a major bronchus.

#### *Trauma Producing Bronchial Lacerations*

Hood and Sloan<sup>2</sup> reported 84 cases in which the cause of injury was recorded. Twenty-five occurred in individuals involved in automobile accidents. Sixteen patients were crushed between or under objects. Thirteen were run over by the wheel of a vehicle and seven were struck by motor vehicles. There were six patients who sustained their injuries from falls. Automobile accidents are the most common cause of bronchial rupture.



The most frequent site of injury was within one or two centimeters of the carina. Rupture of individual lobar bronchi was not infrequent.

Using dogs, Lloyd, et al.,<sup>1</sup> showed that attempts to tear the bronchus from the trachea with force exerted along the longitudinal axis of the trachea and bronchus required a force of eleven kilograms, while a distracting force, acting at the carina on the two bronchi simultaneously required only three kilograms of tension at, or near, the carina. This experimental data would tend to corroborate the clinical frequency of tears in the bronchi near the carina. They believe that the bronchi are torn at a vulnerable point, rather than exploded, sheared or crushed. On the basis of their experimentation, a mechanism of injury was suggested. "When blunt trauma is applied to the chest in the anterior-posterior diameter, the anterior-posterior dimensions of the chest decrease and the transverse dimensions increase, the lungs owing to the negative intra-thoracic pressure remain co-apted to the chest wall and the two lungs are pulled apart producing a distracting force at the carina. If the lateral excursion of the lung is greater beyond the point of elasticity of the bronchi, a tear results, at or near, the carina."

Peters, et al.,<sup>5</sup> do not agree with the mechanism of injury so described. They contend that injury results, not from shearing force, but a rupture of the bronchus due to increased intra-bronchial pressure. This was based on clinical presumption, and not supported by laboratory investigation.

### *Case Report*

A sixteen year old white female, involved in an auto accident was taken to a small community hospital shortly after the injury. Pneumothorax was detected on the left side. A Foley catheter was placed in the left second intercostal space and was attached to a water seal. Because of persistent dyspnea, and lack of expansion of the collapsed left lung, she was transferred to the Roper Hospital six hours after the injury was sustained.

On admission, the patient appeared acutely ill. Blood pressure was 112/85 mm. Hg. Pulse was 130 per minute. Lacerations of the forehead were sutured in the emergency room. Examination of the chest revealed the mediastinum to be shifted to the right. Inspiratory and expiratory rales were heard over the right lung field. Breath sounds were absent on the left side. There was tenderness and swelling of the

right hand and x-ray diagnosis of fracture of the greater multangula and the base of the fourth metacarpal was made. The wrist fracture was treated by the orthopedic service.

A second trocar thoracotomy was performed in the second left intercostal space and connected to a water seal bottle. The previously placed Foley catheter was removed from the interspace. No breath sounds were heard following this. Thoracentesis in the ninth intercostal space posteriorly was productive of 200 ml. of bloody fluid. On October 25, 1959, subcutaneous emphysema was apparent on the left chest wall posterior to the mid-clavicular line, and later in the day involved the anterior chest wall. Blood pressure remained stable. The pulse rate was 110 per minute; and respirations were 20 per minute and not labored. At 10:30 P. M., the blood pressure was stable, but the patient had slight cyanosis. Respirations had increased to 30 per minute. A large amount of air continued to come from the pleural space. An x-ray film of the chest revealed a total pneumothorax with mediastinal shift to the right. A second catheter was placed in the fifth intercostal space in the anterior axillary line and connected to under-water drainage. The lung failed to re-expand after a sufficient interval of observation.

On October 23, the patient was taken to the operating room for exploratory thoracotomy on the left side. The lung was completely collapsed. There was a minimal amount of bloody fluid within the pleural cavity. A rupture in the linear line of the left upper lobe bronchus, measuring approximately 2.5 cm. in length was apparent. The rupture occurred at the junction between the cartilaginous and membranous portion of the bronchus. It was distal to the emergence of the left upper lobe bronchus from the left main stem bronchus. After exposure, the site of the rupture was sutured with interrupted 000 arterial silk. Following repair, adequate expansion of the lung occurred. The chest was closed in the usual manner. The post-operative course was uneventful. The lung was fully expanded and remained so at discharge on the eighth post-operative day.

### *Discussion*

It should be noted that in the case described above, the etiology of the pneumothorax was not determined until operation, 48 hours after admission. Often, the diagnosis of bronchial rupture is not apparent at the time of injury. Therefore, a review of the initial symptoms and findings immediately following injury may be helpful in arriving at an earlier diagnosis.

According to Hood and Sloan,<sup>2</sup> pneumothorax was recorded in only 55 of 82 cases. Tension pneumothorax, thought by some to be a constant finding, occurred in only 21 cases. Subcutaneous emphysema was present in

slightly over half of the patients. In a breakdown of the initial symptoms and findings in these 82 cases, dyspnea was present in 59 cases, pneumothorax in 55, subcutaneous emphysema in 46, cyanosis in 24, pain in 20, hemoptysis in 18, shock in 14, cough in 8, and hemothorax in 4.

Follow-up x-ray films are essential because the initial roentgenogram may show no pneumothorax. Later films will tend to show secondary atelectasis, which may be misinterpreted as pleural fluid. Also, a latent pneumothorax may develop after the initial films are made. Interstitial emphysema and rib fractures have been seen frequently, but are not always present.

With regard to special diagnostic studies, only a few appear to have value. Hood and Sloan<sup>2</sup> report bronchoscopy as the procedure which proved the clinical diagnosis in 54 of the 85 patients. Bronchography was used in 16 late cases to demonstrate either bronchial stricture or termination of bronchial stump, or complete disruption. Bronchography was the method of diagnosis in 9 of 85 cases. Plano-graphy was used occasionally, and was listed as the means of diagnosis in only one case. In 16 of the 85 cases, no special procedure was utilized in the diagnosis, which was made on clinical impression alone.

In the above case reported, follow-up x-ray

films with the persistent pneumothorax failing to respond to adequate pleural drainage suggested the diagnosis of major bronchial rupture.

### *Summary*

The history of compression or crushing injury to the chest, should alert the physician to this serious type of chest injury. Major bronchial rupture is suggested in the patient with pneumothorax whose lung fails to re-expand with an intra-pleural catheter, and in whom a large inexhaustible air leak exists. An individual with massive or rapidly advancing mediastinal and subcutaneous emphysema should be observed closely. Finally, patients with these or less specific findings should not be allowed to escape radiographic observation until two weeks following injury have elapsed. X-ray studies made after this interval will almost certainly reveal the presence of tracheo-bronchial injury because of the developing atelectasis which will occur, should it have escaped detection during the first 48 hours. Serial x-ray studies are of invaluable aid in determining the progression or improvement of pneumothorax; and also the development of atelectasis which usually occurs distal to the rupture of a major bronchus. Bronchoscopy, bronchography and planograms are useful during the late post-injury period in confirming the clinical and x-ray diagnosis.

### REFERENCES

1. Kinsella, T. J., Johnsrud, L. W.: Traumatic rupture of the bronchus. *J. Thoracic Surg.* 16:571, 1947.
2. Hood, R. M., Sloan, H. E.: Injuries of the trachea and major bronchi. *J. Thoracic & Cardiovasc. Surg.* 38:458, 1959.
3. Mahaffey, D. E., Creech, O., Jr., Boren, H. G., and Debaquey, M. E.: Traumatic rupture of the left main bronchus successfully repaired eleven years after injury. *J. Thoracic Surg.* 32:312, 1956.
4. Lloyd, J. R., Heydinger, D. K., Klassen, K. P., and Roettig, L. C.: Rupture of the main bronchi in closed chest injury. *A. M. A. Arch. Surg.* 77:597, 1958.
5. Peters, R. M., Loring, W. E., Sprunt, W. H.: Traumatic rupture of the bronchus: a clinical and experimental study. *Ann. Surg.* 148:871, 1958.

# RENAL TUBULAR ACIDOSIS SECONDARY TO ACQUIRED RENAL DISEASE

CHEVES McC. SMYTHE, M. D.

*Department of Medicine, Medical College of South Carolina*

ROBERT E. SUMNER, M. D.

*Rock Hill, South Carolina*

Acidosis is one of the cardinal features of terminal renal failure. It is dependent upon the retention of anion (negatively charged or "acidic" ions such as  $\text{HPO}_4^{2-}$ ) because of the decreased glomerular filtration rate and the inability of diseased or quantitatively insufficient distal tubules to conserve cations. (positively charged, "basic" ions such as  $\text{Na}^+$ ). As such, acidosis does not develop until the kidney is very nearly destroyed and customarily is seen only with a full blown uremic syndrome.<sup>1, 2</sup> Characteristically also the acidosis is accompanied by a low  $\text{CO}_2$  combining power without elevation of the serum chloride.

Occasionally, one sees an acidotic patient with renal disease who is not in such bad condition. These people will often be found to have hyperchloremia and, on careful investigation, an appreciable amount of renal reserve. Their prognosis is much better than that of the usual acidotic patient, and they should be handled differently. Hyperchloremic acidosis can be the result of either congenital or acquired renal disease.<sup>3, 5</sup> The following is a case of hyperchloremic or renal tubular acidosis presumably as a result of acquired renal disease.

JIF, MCH #33840, a 42 year old white female storekeeper was referred to the Medical College Hospital because of a 54 pound weight loss, anorexia, ease of fatigue, increasing weakness, susceptibility to infections, dryness of her skin and hair, easy bruising, hoarseness, and slow healing of minor injuries. She dated the beginning of her present illness to the delivery of her third child four years before her admission to the hospital when a severe hemorrhage necessitated a cesarean section. For about two years after this she was troubled by slight weakness. Then, two years before admission, her weakness began to increase; she developed some shortness of breath and

blurring of vision; occasional dizzy spells; and increasing weight loss which, over the next 24 months, amounted to over 50 pounds. She had anorexia without dyspepsia or vomiting. Treatment had consisted of vitamin preparations, iron, and other symptomatic medication which had not helped her. She was also known to be anemic. She had noted recently some swelling around her eyes in the morning and some bloating of the lower part of the abdomen. She had also had some minimal swelling of her legs.

The family history was noteworthy in that her mother died of renal disease with uremia at 57. Her father and one brother died of vascular disease.

System review brought out that she occasionally had some numbness and tingling of her hands. She has also had nocturia 3 times nightly. Some definite shortness of breath on effort had been somewhat confused with weakness. She was also occasionally aware of deep regular breathing when at rest.

On physical examination she was a chronically ill woman showing signs of extensive weight loss with a yellowish cast to her skin. She was in no acute distress and temperature and pulse were normal. The respirations were deep and regular, of which she was aware. Blood pressure was 130/80 mm. Hg. The eye-grounds showed only some pallor with no abnormality of the vessels. Physical examination was otherwise remarkable for a grade 1 apical systolic murmur and a palpable, but not enlarged, right kidney.

Intravenous pyelograms were unsatisfactory in that each kidney secreted such a small amount of dye that the collecting structures were not visualized.

Her urine concentrated to 1.011, contained a faint trace of albumin, and was otherwise not remarkable. The sediment was normal. She had a slightly hyperchloremic anemia with 10.5 Gm. of hemoglobin. Reticulocytosis of over 6% was repeatedly present. Cysts of giardia lamblia were found in the stool. A urine culture was negative. Serum iron was normal at 104 micrograms per 100 ml. Protein bound iodine was 2.9 micrograms per litre. Her steroid excretion and  $\text{I}^{131}$  uptake were within normal limits.

Her serum chlorides were elevated to 120 mEq./l. on two occasions. (Normal is 100 mEq./l.) Her carbon dioxide combining power was but 24 vol. % (normal is 60 vol. %). Serum sodium and potassium were normal. Her BUN was 19 mg. per 100 ml. or within normal limits.

The creatinine clearance was 24 ml/min. or 25%

Study supported by the Saul Alexander Renal Research Fund.



of normal. The urea clearance was 16 ml/min. or 20% of normal. PSP excretion was less than 5% in 15 min. Thus, she had grossly decreased renal function and a severe hyperchloremic acidosis.

A renal biopsy was done. This showed changes of severe chronic parenchymal disease consistent with pyelonephritis. (Fig. 1)

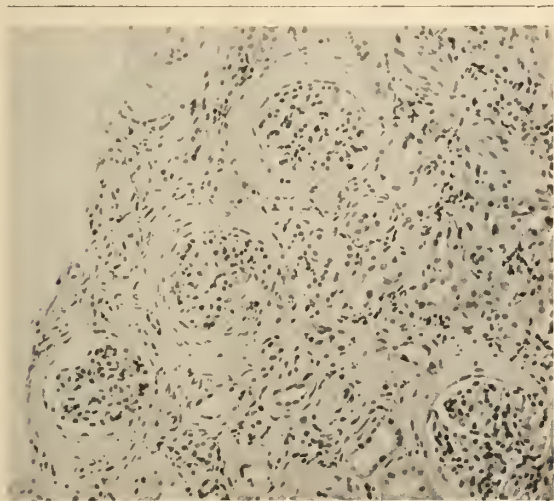


Figure 1.  $\times 150$ .

*With this degree of disease, precise diagnosis is difficult. The striking periglomerular fibrosis, the disorganization of the tubules, the great increase of interstitial tissue, the small numbers of inflammatory cells are characteristic of chronic pyelonephritis.*

She was started on a regimen designed to alkalinize her urine with a mixture of sodium and potassium citrate in sufficient quantity to give her 48 mEq. of extra cation per day, 24 each of sodium and potassium.

On this treatment, the urine quickly reverted to alkaline. The  $\text{CO}_2$  combining power rose to 74 vol. %, and the serum chloride dropped to 96 mEq./l. However, she felt distinctly uncomfortable with symptoms suggesting metabolic alkalosis marked mostly by irritability and numbness and tingling of her extremities. She was discharged from the hospital with instructions to seek the dosage of cation at which she would be most comfortable. She reduced her intake of potassium citrate to 10 mEq. a day. On this, her urine was characteristically alkaline and she had slight numbness of her hands. Her  $\text{CO}_2$  combining power was maintained at 50 vol. %, but the serum chloride remained elevated at 120 mEq./l. She quickly gained 10 pounds and much strength. Her shortness of breath disappeared as she lost her acidosis. Her appetite improved, and she returned to fulltime activity without difficulty when last seen.

In July and again in November of 1960 she was found to have a normal  $\text{CO}_2$  combining power of 60-65 vol. % and a slightly elevated chloride of 109 mEq./l. She continues to feel well.

## Discussion

This relatively unusual case of renal disease is reported because it focuses attention on renal mechanisms in the production of acidosis.

The first of these is dependent largely upon decreased glomerular filtration rate. The products of metabolism characteristically leave an acid residue with an excess of phosphorus and sulfur containing anions. As these accumulate in the body, pH is slowly shifted from faintly alkaline toward the more acid side. At first, the kidney is able to defend the integrity of the interstitial fluid by decreasing tubular reabsorption of anion, but eventually, these defenses are overcome and an acidosis marked by a low  $\text{CO}_2$  combining power, normal serum chloride, and elevation of miscellaneous anions develops. This biochemical lesion characteristically can be corrected only by increasing glomerular filtration rate which is not possible in the end stages of renal disease.

Another mechanism by which acidosis may develop is dependent upon the excess wastage of tissue cations by the distal tubule. Characteristically, the kidney conserves sodium by exchanging the sodium ion in the tubular lumen for either a hydrogen or a potassium ion secreted by the distal tubule. A normal distal tubule is able to secrete hydrogen ion against a considerable concentration gradient. To express this in other terms, the biochemical mechanisms in the distal tubule are able to push hydrogen ions from a faintly alkaline intracellular medium into a relatively very acidic renal tubular lumen. Congenital renal tubular acidosis is thought to be due to inborn error in the distal tubule marked by inability to secrete hydrogen ion against a concentration gradient.<sup>4, 5</sup> Acquired renal tubular acidosis, which this patient presumably has, is usually thought to be due to chronic pyelonephritis<sup>3</sup> and is characterized by the same defect. Congenital renal tubular acidosis is an increasingly widely appreciated syndrome. It may present as or be a part of a number of diseases: nephrocalcinosis, recurrent nephrolithiasis, pitressin resistant diabetes insipidus, recurrent pyelonephritis, vitamin D resistant

rickets, osteomalacia, muscle weakness or paralysis secondary to potassium loss, infantile hyperchloremic acidosis, the de Toni-Fanconi syndrome, and other congenital biochemical renal tubular defects. Although it is a rare biochemical lesion, its diffuse clinical expression makes some appreciation of it valuable to those interested in renal diseases.

Even though this woman has a decreased glomerular filtration rate, it is not sufficiently decreased to result in the accumulation of phosphate and sulfate in her peripheral blood. Her hyperchloremia is marked by the accumu-

lation of chloride and a low  $\text{CO}_2$  combining power. Her major biochemical lesion was corrected by supplying her the cations which her distal tubule characteristically wastes. This is best done by giving her an ample oral dose of sodium and potassium. On this, her major difficulties were corrected, her chronic acidosis ameliorated, and her sense of well being improved.

Her eventual prognosis is limited admittedly, but if her acquired renal disease is not advancing, she can conceivably maintain herself in her current status for many months.

#### REFERENCES

1. Franklin, S. S. and Merrill, J. P. The kidney in health; the nephron in disease. *Am. J. Med.*, 28: 1, 1960.
2. Bricker, N. S., Morris, P. A. F., and Kime, S. W., Jr., The pathologic physiology of chronic Bright's disease. An exposition of the "intact nephron hypothesis." *Am. J. Med.* 28: 77, 1960.
3. Lathe, W. Hyperchloremic acidosis in chronic pyelonephritis. *New Eng. J. Med.*, 258: 103, 1958.
4. Ellington, J. R., Hutto, E. J., Webster, G. D., and McCance, R. A. The renal excretion of hydrogen ion in renal tubular acidosis. *Am. J. Med.*, 29: 554, 1960.
5. Reynolds, T. B. Observations on the pathogenesis of renal tubular acidosis. *Am. J. Med.*, 25: 503, 1958.

*T wave abnormalities in patients with no evident heart disease: The Effect of Posture*, by Wm. Bonner and J. R. Durant (Charleston). *Am. J. Med. Sc.* 241: 179, 1961.

Fourteen patients with no evidence of heart disease were found to have T wave abnormalities on standard electrocardiograms. Eleven of these showed accentuation of the abnormalities when the tracings were repeated with the patient standing, while the electrocardiograms of the other three patients returned toward normal.

Seventy-four healthy individuals, with normal electrocardiograms in recumbency, also had tracings when standing. Thirty-six developed T wave abnormalities.

T wave changes which occur when normal individuals are in the erect position appear to be due to increased activity of the sympathetic nervous system. Imbalance of the autonomic nervous system with sympathetic overactivity is believed to be the cause of the T wave abnormalities shown by the first 11 of the patients with abnormal recumbent electrocardiograms. Parasympathetic overactivity was thought to exist in the 3 patients whose abnormalities were corrected when standing.

The fact that T wave abnormalities may occur in

patients who have no heart disease is stressed.

W. M. Bonner

*Acute porphyria complicated by pregnancy: report of a case*, by Stanley Gould, M. D., H. M. Allison, M. D. & L. N. Bellew, M. D. (Greenville) *Obst. & Gynec.* 17:109, Jan. 1961.

Porphyria complicated by pregnancy is very uncommon. Source material for this report enumerated 42 previously described cases. A large majority of these patients were afflicted with the intermittent form of the disease, and it was more common among primigravidas.

In this report, a detailed study of a 33-year-old multipara was presented, in which the pregnancy was carried to a successful delivery. Of particular interest were the response of the patient to medication during pregnancy and labor, and the nature of her postpartum course.

Observations of the interplay between pregnancy and porphyria are varied, and opinions on prognosis are divided. In this instance, exacerbation of symptoms with intensification post-partum lends support to other opinions that pregnancy aggravates porphyria except in mild or latent cases.

# DRUG SUPPLY AND BLOCKADE RUNNERS, 1861-65

J. HAMPTON HOCH, D. Sc.

*Professor of Biology and Pharmacognosy, School of  
Pharmacy, Medical College of South Carolina*

Of all the major shortages appearing during the Confederate War that of medicine received more widespread concentrated study and effort than any other. Patriotic individuals as well as the government worked to find answers to the lack of medicines. Substitutes were discovered and promoted but they were generally less effective. Large quantities of medicine and anesthetics were prime necessities for the military and for the people at home, but the latter were forced to do without or to concoct their own substitutes from native medicinal plants or other materials available to them.

The South had been dependent on outside sources for all kinds of medical supplies. This vulnerability was immediately recognized by the North when it placed medicine on the contraband list. Reaction to this decision in the South, and even in the North, was that it was an inhumane, barbarous act.

The Confederacy had four possible sources of medical supplies: 1. Capture of medical stores and equipment, 2. Manufacture of medicines from materials at hand, 3. Smuggling across the border and through the lines, 4. Running the blockade. All of these sources, collectively, were less than adequate in the long run. Running the blockade was more successful and more productive than the other three.

Capture of enemy supply trains carrying medical stores was a once-in-a-while bonus that could not be depended on to yield needed items. Help from this source was not significant.

Smuggling was a highly remunerative occupation for a few individuals. Drugs could be concealed on one's person, sewn into clothing, under skirts, and a variety of dodges were used, such as quinine hidden in a doll's head, etc. The stories relating to smuggling are many. Mississippi River boats did carry on contraband drug trade. Northern speculators

operating from Kentucky and Illinois shipped supplies into Tennessee and Arkansas and states farther south. But all this was little more than a drop in the bucket as far as meeting the total needs of the Confederacy. There was little medicine coming across the Rio Grande into Texas.

Manufacture of medicines at the various laboratories established by the government plus blockade running was the really significant source of medicines for six to seven million people for nearly four years.

The Confederate government and the Surgeon-General, C. S. A., sent agents to Europe to purchase medical supplies. These men were primarily concerned with obtaining supplies for the armed forces. The Congress voted a total of nearly \$36 million for medical supplies for the armed forces; in addition, special appropriations were made for specific purposes, e. g., 30,000 pounds for purchases in Paris. Getting these medicines into the South from Europe became a problem of increasing difficulty as time went on. Records of actual materials, quantities and real pressing needs are very fragmentary and incomplete. The cargo lists in official records are inadequate, only a relative few specify actual contents of cargoes. It would be interesting to know what items were included in such listings as "5 cases of drugs", "9 bales medicinal stores", "2 drums of drugs", etc. Undoubtedly drugs were a part of the "merchandise" listed on many bills of lading. However, we know that when the "Peterhoff" was captured (Feb. 1863), off St. Thomas en route from London to the mouth of the Rio Grande, her cargo included 1000 lb. calomel, 265 lb. chloroform, 2640 oz. quinine, and much morphine.

One method the government used to insure supplies for the military forces was to establish a military monopoly for certain needed items. Alum, calomel, castor oil, copperas, flax, morphine, opium and quinine were listed



as items that could only be sold to an authorized Confederate purchasing officer.

Among the liabilities of the Confederacy was its dependence on outside sources of supply for many of the essentials. Lacking resources and manufacturing plants the South had to import to survive. President Lincoln realized this and five days after Fort Sumter was evacuated a blockade was announced to prevent importation of arms and ammunition, clothing, food, drugs and chemicals. At first it was largely a "paper" blockade and was intended to force European nations to declare their neutrality.

The enormity of the task of blockading over 3500 miles of Southern coastline became apparent at once. The North had to build ships for this purpose, they had to develop satisfactory technics, and had to gain experience before there could be an effective blockade of the principal ports and subsidiary entrances to the Confederacy. Federal bases established on land enabled the blockading fleet to function more effectively, e. g., the capture of Port Royal and Beaufort in November 1861 became a threat to both Charleston and Savannah and enabled a tightening of the blockade of Savannah.

Southern response to the blockade was at first a mixture of contempt and disdain. The South had naval men but no ships, and no facilities to build them. Foreign agents were directed to procure ships as well as cargoes for the ships. The financial arrangements for this business involved exchanges of cotton, naval stores and tobacco for what the South needed. Cotton, the main source of credit, was seized by the government and placed in the hands of commercial agents as a medium of exchange or for establishing credit. Priorities were established for incoming cargoes—munitions, clothing, drugs and chemicals.

In the long run the Confederacy was unable to build or buy an adequate navy and never was strong enough to raise the blockade along the Atlantic Coast despite a few fearless and successful raids against the blockading vessels.

At first many vessels steamed merrily in and out of Southern ports with small chance of being caught. The Confederate government, states, private companies, and private indi-

viduals engaged in running the blockade. Some of the larger merchant houses maintained their own fleets. Some individual operators were actually brokers who contracted to deliver cargoes for a percentage, usually 5%, of their value. Some foreign firms rendered noteworthy service to the Confederacy. Foremost among them Fraser, Trenholme and Co. This Liverpool affiliate of Charleston's John Fraser and Co. was the authorized commercial agent for the C. S. A. in England. Charles K. Prieau, a junior partner, was in charge of the firm's English business. After George A. Trenholme succeeded (July 1864) Memminger as Secretary of the Treasury his partner and brother-in-law, Theodore Wagner, handled the firm's affairs in Charleston. Trenholme headed the most powerful and widespread financial operation of blockade running.

In 1861 the "runners" were slow, small craft and coastwise steamers which had lost their usual business. But later on vessels were built abroad designed specifically for running the blockade: long, low, fast, shallow-draft steamers, usually of 400 to 600 tons. Brave and daring adventurers manned these vessels; some of them former U. S. Navy officers, others English naval officers. Pilots familiar with coastal waters were in great demand.

By June 1862 the losses of blockade runners started in earnest, even though the ratio of success to capture was estimated at 7 to 1. With each passing month the odds were diminished. At the end, in 1865, only half the attempts to run the blockade were successful. By the end of the second year of war only the specially built runners stood much chance of getting through.

Until the beginning of 1865 when Fort Fisher and Wilmington fell, there always was some port that remained at least partially open to receive cargoes from abroad. Wilmington played a leading role longer than any other port. Charleston managed to have some vessels slip in and out, despite the long siege, until the very end of the war.

Bermuda, Nassau, Havana, and Matamoras were intermediary points used as deposit places for supplies originating in Europe or the North. Here were received munitions of war and medicines which were exchanged for

the cotton, turpentine and tobacco brought out from the South. Large steamers from Europe unloaded their cargoes of war supplies and the small, fast "runners" brought them into Confederate ports. Sometimes large English steamers came all the way from Europe to ports in the South, e. g., three arrived in Texas in July 1863. Nassau and Bermuda served Wilmington and Charleston; Cuba shipped to Gulf ports.

Blockade running was profitable business for private individuals or firms. The crews received high wages and usually a bounty as well. Captain James Carlin of the "Alice" contracted with the William C. Bee Co. of Charleston for trips outbound to Nassau for \$4000 fee plus half the passage money, but for inbound trips he was to receive \$15,000. Captains' privileges included the right to carry their own speculative stock, which frequently was drugs because of small bulk and great profit. Much criticism was directed at these profits and at the types of cargoes frequently carried. Successful investments might yield 1500 to 2000% profit.

In August 1863 the government placed restrictions on private blockade-running ships and eventually Congress (Feb. 1864) declared luxury imports (silks, laces, jewels, cigars, liquors) illegal, but the law was not very effectively enforced. A South Carolina law (Feb. 1863) specifically mentioned drugs, medicines and various items not included in other State laws intending to solve the problem of speculation. However, speculation began early in the war and continued to its end. Proclamations, appeals and finally legislation were unable to correct the situation.

Medical supplies brought through the blockade and intended for civilian use were usually sold at auction at the port where the runner docked. Local newspapers carried advance notices of such sales and prospective purchasers might travel hundreds of miles to attend. Pharmacists in or near port cities had a better chance to secure some drugs which communities in the interior lacked. Rail or wagon transport of freight was hard to procure. By the time "blockade" drugs seeped down to patients in remote areas they were much higher priced. Towns in the interior

suffered most from drug shortages, but even in port cities the lack of drugs forced some drug stores to close their doors.

Auction sales of drugs in cargoes brought in by blockade runners were held in Charleston as early as November 1861, but local wholesale druggists continued to advertise their stocks of even such items as quinine, opium, morphine, calomel, quicksilver up until the end of 1862.

Alcohol was an item in limited and spotty supply on the homefront. In April 1862 a Charleston wholesale druggist wanted 500 barrels "much needed by Physicians and Druggists for compounding Medicines. Offer four times ordinary Baltimore price for 80%, and a premium for 95%".

It has been said repeatedly that opium and morphine, chloroform and ether, and quinine were the critical drugs; and this is true because there were no effective substitutes for them. However, other items for which substitutes could be and often were developed also remained in steady demand. Favorite cathartics are noteworthy in this connection.

The shortage of quinine was more acute than other critically needed drugs. Its scarcity became apparent in the first summer of the war and grew steadily worse. Speculation in quinine created a scandal almost equal to that of cotton speculation. Ether was scarcely ever included in public drug auctions.

Detailed information as to quantities and prices (up to the end 1863) of drug items offered at cargo sales of "runners" can be gathered from newspapers. Such files provide data that is not available elsewhere. Prices recorded in the newspapers are before runaway inflation of the Confederate currency. The latest price quotations I gathered (Nov.-Dec. 1863) were when the ratio value of gold to currency was 18:1. It was September 1864 before the very rapid rise in this ratio began.

Tabulations and comparisons of price data indicate vast differences between the prices paid at Nassau and selling prices at Atlantic ports (18 to 70 times). Most price advances in the period from Nov. 1862 to Dec. 1863 were neither sharply nor invariably upward. Prices at interior points, e. g., Columbus, Miss.,

were at least double the prices in the vicinity of the ports.

The attached tabulation is a sampling of prices of a few items on the Atlantic seaboard.

Surgical implements of all sorts became very

were set up in South Carolina, Alabama, and Louisiana. "Corks" were cut from corn cobs and made from pressed fabrics.

The sugar shortage was stretched out by the use of sorghum and honey.

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*Tabulation of some drug item prices*

	Nov. 1862	Apr. 1863	Dec. 1863
Alcohol	—	\$43.25 gal.	\$71.00 gal.
Calomel	\$ 9.00 lb.	11.25 lb.	11.75 lb.
Castor Oil	17.00 gal.	16.00 gal.	—
Chloroform	13.00 lb.	15.50 lb.	7.50 lb.*
Morphine	50.00 oz.	21.00 oz.	50.00 oz.
Opium	39.50 lb. (Powd.)	43.00 lb. (Gum)	—
Potass. Iodide	18.50 lb.	26.00 lb. (March)	—
Quinine	18.00 oz.	17.00 oz. (March)	71.00 oz.

\*Perhaps a typographical error.

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scarce during the war. Some were brought through the blockade; fewer were manufactured in Richmond. These were directed into military channels and the homefront got practically none.

Bandages and sponges were scarce and much extemporizing was required. Adhesive plaster was imported but not in sufficient amount.

Bottles and corks were insufficient in quantity. Factories for bottle manufacture

Whiskey and alcohol were distilled from anything and everything—including grain, despite legislation against using grain for whiskey. Moonshiners ran day and night. New Orleans helped out with rum from molasses.

But all the extemporizing, all the ingenuity exerted to meet situations, all the sacrifices made could not arrest the slow strangulation of the blockade. The end, more bitter than the missing quinine, was here.



*Confederate Steamer "Anglia," Captured off Bulls Bay, Twenty-five miles north of Charleston, S. C., by the U. S. Gunboats "Restless" and "Flag," Sunday, October 19th, 1862.*



# A SYMPOSIUM ON GLAUCOMA

J. HOWARD STOKES, M. D., FLORENCE, S. C., IN COLLABORATION WITH RODERICK MACDONALD, M. D., ROCK HILL, S. C., THOMAS GAINES, M. D., ANDERSON, S. C., JOSEPH WORKMAN, M. D., COLUMBIA, S. C., PIERRE JENKINS, M. D., CHARLESTON, S. C.

**D**r. Howard Stokes, Florence, S. C.: Members of the South Carolina Medical Association, distinguished guests, we are to present a symposium on glaucoma and since we have only 30 minutes for the presentation we will not have time for questions but there are many members of the South Carolina Society of Ophthalmology here this afternoon and if you have questions — and we all hope that you will, we will be very happy to answer them.

By the same token the papers we have here are not completed papers but rather summaries, the originals represent a very excellent research library on each man's part.

The participants this afternoon in the order of their appearance are Dr. Pierre Jenkins, Professor and Chairman of the Department of Ophthalmology, Medical College of South Carolina, who is going to discuss "Histopathology of the Eye as Related to Glaucoma." The next is Dr. Thomas R. Gaines of Anderson, who will discuss "Types of Glaucoma." Then Dr. Joseph B. Workman of Columbia, who will discuss "The Treatment of Glaucoma," and Dr. Roderick Macdonald of Rock Hill, who will summarize in great part all the papers.

There is now in the lower lobby of this building a booth set up not only to distribute material which we believe that you and your patients would like to have about glaucoma but also there is a Glaucoma Detection Center there and during this afternoon and tomorrow morning and afternoon the members of the South Carolina Society of Ophthalmology and Otolaryngology will be glad to have you come by and have your tension "took".

## A Brief Outline of the Patho-Physiology of Glaucoma

PIERRE G. JENKINS, M. D., F.A.C.S.

The word "glaucoma" designates a condition of the eye wherein numerous factors con-

tribute to an increase in intraocular pressure whereby a complex and subtle mechanism is involved and thereby upsets the maintenance of the so-called steady state of pressure within that eye. Hence the production of damaging effects on structures within an eye so affected which results in serious loss of function of that particular eye; or — as someone has recently put it — "glaucoma, as we know it now, begins when the intraocular pressure reaches a level that is too high for the eye to tolerate."

The types of glaucoma found are generally classified as primary and secondary.

The primary glaucomas are divided into the chronic or open angle glaucoma, and the angle closure glaucoma, or narrow angle glaucoma. About 80% of the people having glaucoma have open angle type.

In order to explain the differences inherent in this classification a brief reference to certain anatomic areas in the anterior segment of the eyeball are important. Looking at a cross section of the globe in its anterior portion we can find the following structures.

The limbus — the outer boundary of the cornea.

The anterior chamber, a space between the cornea anteriorly, the corneoscleral trabecula, a portion of the ciliary body, the iris and the central portion of the lens posteriorly.

The anterior chamber in the normal eye is deeper in youth and in those with myopia, its depth lessens toward the periphery.

During accommodation the anterior surface of the lens moves forward, carrying the iris forward; this causes slight shallowing of the anterior chamber.

The angle of the anterior chamber consists of the peripheral portion of the anterior chamber bounded posteriorly by the iris and anteriorly by the corneoscleral trabecula and the most anterior portion of the ciliary body. The latter forms the apex of the angle recess.

In the embryo the angle is filled with meso-

dermal material. This latter atrophies and results in a deep recess bounded by a loose tissue meshwork, and this we call the trabecula. In its two thirds it contains a labyrinth of spaces which have access to the wall of Schlemm's canal.

The trabecular spaces are connected with the canal of Schlemm by inner canals and aqueous flows through these to the canal of Schlemm. There are other channels around the canal of Schlemm which communicate with the anterior ciliary veins, and when one of its branches reaches the scleral surface it is called an aqueous vein.

The aqueous humor is secreted from the ciliary body and enters the eye at that point in the posterior chamber, then enters the anterior chamber through the pupil and leaves the eye mainly by way of the angle of the anterior chamber through the intra-trabecular spaces into the canal of Schlemm and thence into the venous channels mentioned above.

"The 2 mm. wide band around the corneoscleral junction holds the most important pathway of outflow of aqueous in the eye. It is the pathologic alteration of this tiny area around the corneal sclera junction that leads to glaucoma." (G. Dvorak-Theobald).

Although the ultimate cause of primary glaucoma is unknown, in general, there are factors which no doubt operate in producing the pathology inherent in glaucoma. These are the mechanism of edema, seen especially in the cornea, iris and ciliary body; the effects of arteriosclerosis, which causes malnutrition of the ciliary processes and iris, and causes pigment migration therefrom thus causing obstruction of the intra-trabecular spaces with pigment granules; and hypertrophy of tissues, especially connective tissues such as the sclera through which pass the aqueous pathways. The latter is found especially in the aged. Changes in the endothelium in the aqueous pathways also may obstruct outflow.

The effects of increased intraocular pressure may affect most of the structure of the globe. As far as vision is concerned, the effects on the retina and optic nerve are most important.

In the retina degenerative changes occur first in the periphery and arcuate nerve fiber layer, resulting in visual field changes, at first

minimal and then extending further. These changes are due to a combination of increased pressure and ischemia.

The optic nerve becomes atrophic and cystic. The lamina cribrosa is bowed backwards and we have the picture of a cupping of the disc.

In open angle glaucoma, vascular changes characterized by disease of the endothelium as evidenced by chronic edema, impede the blood supply. These vascular changes may be associated with general vascular disease. This is an insidious process which leads to blindness (absolute glaucoma) with or without an intervening acute inflammatory episode.

In open angle glaucoma the aqueous has access to the filtration apparatus or the trabecula at the anterior chamber angle at all times and the obstruction to outflow of aqueous resides in the filtration apparatus.

In angle closure (narrow angle) glaucoma the sole cause of the elevation of tension is closure of the angle by apposition of the peripheral iris to the trabecular wall. The type of eye especially subject to this form of the disease is more apt to be hyperopic (farsighted) with a small cornea, a smaller anterior segment and a generally smaller eye.

Here the ciliary muscle is thicker, the iris more convex and the lens larger in proportion to space available to it.

Under certain conditions in untreated open angle glaucoma, at all stages of the disease, whether the tension is high or low, there is obstruction to the outflow of the aqueous from the anterior chamber.

In narrow angle glaucoma, on the other hand, the filtration apparatus is normal. When the angle is open the tension is normal. When the tension comes to normal, either spontaneously or under the influence of drugs, the rate of outflow of aqueous can be and is found to be normal.

When the angle is closed wholly or in part the tension rises in proportion to the extent of the angle which is closed, and the rate of outflow becomes poorer and poorer as more and more of the angle becomes closed by contact between the periphery of the iris and the trabecula.

The mechanism of angle closure in narrow

angle glaucoma, in brief, is that something causes the iris to come in contact with the trabecula so as to close the angle and deny aqueous access to the angle structures. The factors here may be a dilated pupil or a relative pupillary block, iris bombe, and miosis (drug induced.)

Here neurovascular in addition to mechanical factors are often involved. In other words, psychosomatic or emotional upsets and social stresses figure largely in the etiology. We therefore find that acute attacks of elevated intraocular pressure occur during emotional crises.

In secondary glaucoma, the causes of the pathologic change are many and varied. Essentially there is a mechanical obstruction of the angle of the anterior chamber or of the openings of the trabeculae themselves. This form of glaucoma is secondary to pre-existing ocular disease, either inflammatory, degenerative, neoplastic, traumatic (contusions, accidental perforating wounds and operative procedures,) metabolic disturbances or vascular retinopathies.

Congenital glaucoma, somewhat different in its pathoanatomic etiology, generally speaking is due either to a lack of development of the trabeculae and the canal of Schlemm or that which is secondary to an inflammatory process. The clinical manifestations of this condition will be described by others on this panel.

### Symptomatology and Diagnosis

THOMAS R. GAINES, M. D.

The purpose and scope of this panel precludes the inclusion of the rarer and questionable forms of glaucoma and some of the more highly specialized means of diagnosis.

#### I. Infantile type

##### A. Symptomatology

###### 1. Subjective

- a. If child is old enough to recognize it, pain
- b. Visual disturbance

###### 2. Objective

- a. Reddening and injection of globe, one or both
- b. Lacrimation and photophobia
- c. Fretfulness

- d. Later, enlargement of cornea
- e. In late stages clouding of cornea and enlargement of globe
- f. Increase in ocular tension

##### B. Diagnosis

1. First few weeks or months of life
2. Above symptoms
3. Usually binocular
4. Angle filled with mesodermal tissue?

#### II. Secondary glaucoma

##### A. Symptomatology

###### 1. Subjective

- a. Painful, tender globe
- b. Decrease in vision

###### 2. Objective

- a. Pre-existing disease or lesion; inflammatory, vascular, or neoplastic; lens displacement; trauma; drug mydriasis; hypermature cataract; retinal separation and other factors too numerous to mention
- b. Usually injection of the globe
- c. Increase in ocular tension, 25 mm Hg. or above (Schiotz tonometer)
- d. Cornea may be hazy and edematous

##### B. Diagnosis

1. Above signs and symptoms
2. Usually monocular
3. Occurs at any age

#### III. Angle-closure or narrow angle glaucoma (formerly known as congestive glaucoma)

##### A. Acute Type

###### 1. Symptomatology

###### a. Subjective

- i. Pain, usually severe and excruciating
- ii. Decreasing vision varying from moderate loss to light perception only
- iii. Frequently accompanied by unilateral headache, nausea, and vomiting

###### b. Objective

- i. Congestion and reddening of the globe



- ii. Usually monocular
- iii. Pupil usually semi-dilated and fixed
- iv. Cornea clear to steamy, becoming more cloudy as the tension increases
- v. Shallow anterior chamber
- vi. Narrow or closed angle
- vii. Eye stony hard to touch, the tonometer often showing 50 or more mm of Hg. of ocular tension

## 2. Diagnosis

- a. Usually in individuals of middle age or over
- b. Differentiate from acute uveitis, keratitis, and conjunctivitis by taking the ocular tension and by finer points known to the ophthalmologist
- c. Above symptoms

## B. Chronic Type

### 1. Symptomatology

- a. Subjective
  - i. Freedom from subjective symptoms in many cases, in others vague fatigue symptoms or sense of eye strain
  - ii. Halos around lights (occasional)
- b. Objective
  - i. Globe white and quiet
  - ii. Anterior chamber shallow (usually)
  - iii. Chamber angle narrow
  - iv. Field defects and cupping of the optic disc as the process advances
  - v. Increase in ocular tension
  - vi. Normal or dilated pupil

### 2. Diagnosis

- a. Usually binocular
- b. Usually in middle age or after
- c. Increase in tension
- d. Angle narrow or closed
- e. Central and peripheral field defects in advanced cases
- f. Provocative test:
  - i. One hour in dark room or bandaging both eyes usually

produces increase 6 to 8 mm Hg. in ocular tension

IV. Open or wide angle glaucoma: This is the most common form of glaucoma; is stealthy, and it is of greatest importance to realize there may be no symptoms for a long period of time.

## A. Symptomatology

### 1. Early Cases

- a. Subjective
  - i. Frequently symptomless
  - ii. Possibly "asthenopia," slight ocular discomfort, feeling of "eye strain"
  - iii. Occasional halo around lights
- b. Objective
  - i. Globes white and quiet
  - ii. Pupils normal to semi-dilated in size
  - iii. Fields full, to minor contraction peripherally, or minor central defects
  - iv. Optic discs normal to slight deepening or "saucering"
  - v. Tension may be normal periodically
  - vi. Chamber angle open

### 2. Advanced Cases

- a. Subjective
  - i. Defective vision
  - ii. Discomfort, mild to severe, increasing as the disease progresses
- b. Objective
  - i. Globes often white
  - ii. Pupils usually semi-dilated
  - iii. Field defects peripherally and centrally
  - iv. Cupping of optic discs with pallor
  - v. Chamber angle open
  - vi. Increasing ocular tension becoming less amenable to treatment
  - vii. Blindness in uncontrolled cases

## B. Diagnosis

- 1. Usually binocular
- 2. Usually in middle age or thereafter

3. Above symptoms
4. Provocative tests
  - a. Water drinking test: Imbibing a quart of water produces a rise in ocular tension in 15 to 45 minutes
5. Tonometer tests usually show an increase in tension at *some period during the day* (May have to be repeated several times in early cases)
6. Fundus studies show typical changes in most cases after the early stages (cupping or pallor of disc or both)
7. Tonography shows a diminution in the outflow quotient from the eye
8. Heredity may be a factor
9. Far-advanced cases present no problem; a hard eye, diminished vision, greatly narrowed fields, pale cupped discs

#### Treatment

J. B. WORKMAN, JR., M. D.

We will begin the discussion of the treatment of glaucoma with a few general remarks.

Once the diagnosis is made, the patients should have explained to them the nature of the disease. They should understand the condition will be present the remainder of their lives and that it will be necessary for them to be under the continuous care of a physician.

These patients are generally of a nervous temperament and live under considerable stress. They should be asked to avoid situations that create emotional upsets. The use of tranquilizing drugs may be indicated. If the patients are engaged in activities which create tension, such as club or church work, civic organizations, and the like, it may be wise that they discontinue some or all of these.

The ingestion of large amounts of fluids or food may cause the intra-ocular tension to become elevated and should be avoided.

A rise of the intra-ocular tension may be produced by being in a dark room and should be avoided or compensated for by the use of a miotic drug, locally, at the time.

In discussing the therapy of the specific

types, we will first discuss the management of narrow angle glaucoma, with and without an acute attack, and then the care of open angle glaucoma.

The treatment of congenital glaucoma and glaucoma arising secondary to disease or trauma will be omitted due to restricted time.

Approximately 20% of glaucomas are of the narrow angle type, i. e., the aqueous is not allowed to drain from the eye at the proper rate due to the iris blocking the angle of outflow. This type eye is prone to have an acute congestive attack.

It is the consensus today that the eye in an acute attack, is best managed by a co-ordination of medical-surgical management. The increased tension is, if possible, first controlled by medical means. This allows the congestive phase and high intra-ocular tension to subside. Surgery should be avoided, if possible, during the acute phase as operation is technically more difficult and the risk of complications greater. To accomplish this, miotic drugs are used to constrict the pupil and pull the iris away from the filtering angle. In conjunction with these miotics, drugs to cause a decrease in the rate of aqueous formation may be given orally or intravenously.

Patients who have been fortunate enough as to have had the diagnosis of narrow angle glaucoma made before having an acute attack, may be controlled with a miotic drug as pilocarpine, until the question of surgery has been decided. Peripheral iridectomy is the operation indicated in narrow angle glaucoma. By removing a small piece of iris in the periphery, aqueous has free access to the anterior chamber and the iris falls away from the filtering angle. If the operation has been done early, little or no miotic medication may be necessary to maintain normal eye pressure. We would like to emphasize that this type of glaucoma can be permanently cured by this operation.

Statistics show that in patients who had had an attack of acute glaucoma in one eye, the second eye became involved in 62% of the cases in 5 years. Forty per cent of patients who used miotics continuously in the second eye had an acute attack in this eye despite prophylactic medical means. This indicates that the

peripheral iridectomy should be done on both eyes in patients with narrow angle glaucoma. This operative procedure is not disfiguring and carries with it a minimum of complications.

In contrast to narrow angle glaucoma, conservative treatment is indicated in patients with open angle glaucoma. Local medication as pilocarpine, eserine, prostigmine, carbachol (Carcholin), demecarium bromide (Humorsol), echothiophate (Phospholine iodide), and Di-isopropyl-fluorophosphate are used.

The carbonic anhydrase inhibitor drugs such as acetazoleamide (Diamox), dichlorphenamide (Daramide), and methazolamide (Neptazane) should not be used until it is evident the miotic drugs, of themselves, will not control the tension to below 25 mm. Hg. (Schiotz) throughout the day.

Frequent follow-up studies are indicated. The frequency of examinations depends on the result of these tests. It is, at times, difficult to decide if and when surgical intervention should be undertaken. This calls for an entire review of the case, considering the age, life expectancy, and the status of the glaucoma. If the patient is losing field, his tension remains high and the glaucoma is advancing, surgical intervention is indicated. Surgery is not always 100% successful in this type of glaucoma.

In summary, we may say the therapy differs markedly, depending upon the type of glaucoma. In narrow angle glaucoma medical treatment is used primarily to bring an acute attack under control. When tension is normalized, surgery, in the form of a peripheral iridectomy, is indicated on both eyes. In open angle glaucoma, the patient is carried on medical treatment as long as possible, that is, until the tension becomes obviously out of control or there is loss of visual function due to the glaucoma; surgical intervention is then indicated.

The surgical principles are:

1. The creation of a fistulous tract between the anterior chamber and the subconjunctival space so the aqueous may filter into this space and be absorbed. Examples of this type operation are indencleisis and Elliott trephining.

2. The creation of a space between the anterior chamber and the choroidal space—so the aqueous may drain into this area and be

absorbed. This procedure is known as cyclo-dialysis.

3. Treating the area of sclera over the ciliary body with diathermy so that less aqueous will be formed. This procedure is known as cyclo-diathermy.

Conservatism is urged in the surgical treatment of open angle glaucoma. Such conservatism, however, should not be practiced to the extent of permitting the patient to go blind while one attempts to avoid an operation.

### Summary

DR. RODERICK MACDONALD

My colleagues on the panel have given you the highlights of glaucoma. You have heard of the various types of glaucoma, the pathology of glaucoma, and its diagnosis and treatment.

Glaucoma is an insidious disease more prevalent than is generally supposed. Recent surveys show that approximately 2% of the age of 40, or about 1 person out of 50 in this age group is afflicted with this sneak thief of sight. At least 1 million of our fellow Americans are victims of this malady without being aware of it. According to the press, a recent Glaucoma Detection Clinic was conducted by the eye physicians of Charlotte, North Carolina, and out of 1,200 people examined 50 persons were found to have glaucoma.

There are many facets to glaucoma, increased intra-ocular tension being common to all. Many patients are unaware of its existence until irreversible damage is done. Central vision usually remains good, but peripheral vision is relentlessly destroyed.

There are several methods whereby glaucoma may be detected, and here now I would like to stress that their detection to a large extent rests with general practitioners and I would further stress that once detected it requires all the skill and knowledge of an ophthalmologist to adequately cope with it.

Routine tonometry of all patients over 40, intelligently and accurately done at least once a year, is most revealing. Suspicious cases are given further examination by visual field determination; this includes both perimeter and target screen. Likewise the various provocative tests are given such as dilation of pupil, dark



room examination, and water drinking. The above tests may be amplified by gonioscopy and tonography.

Industry has become very much interested in detection of glaucoma and more plants require examination before the individual is given a job.

The National Medical Foundation for Eye Care is carrying on an extensive nationwide educational program. Likewise the National Society for the Prevention of Blindness and many allied organizations are actively engaged by all available media in informing the public of this insidious disease and the crippling sequelae that follow its neglect.

Unfortunately there are many ill-founded and misleading ideas about glaucoma. The frequent changing of glasses is not the answer. One must be thoroughly versed in ophthalmic pathology. Optometrists are not prepared to properly recognize this disease, nor properly advise patients as to its tragic consequences. As mentioned above, Glaucoma Detection Clinics are being urged by ophthalmologists and medical men generally. Once the disease is found out, the patient should be referred to a physician who is well versed in its treatment and one who is capable of correctly advising the afflicted individual.

There are several varieties of glaucoma, however there are two common types:

- (1) Narrow angle (sometimes called acute glaucoma)
- (2) Wide angle glaucoma (sometimes called chronic glaucoma)

These two conditions differ widely in symptomatology.

Narrow angle glaucoma is characterized by sudden attacks, haloes are seen around lights, vision is blurred, pain is felt in and around the eye, usually one eye is involved. These attacks may last an hour or so and clear up as rapidly as they came on. They may be precipitated by emotions, ingestion of large amounts of fluids — beverages, coffee, tea, liquors, wine, beer, etc. They are most dramatic in onset and to see a full blown attack of acute congestive glaucoma is an unforgettable experience. Miotics, Diamox and other carbonic anhydrase inhibitors are used plus, in many instances, surgery.

Unlike the aforementioned type, the lack of symptoms makes the early detection of the wide angle type most important especially before irreparable deterioration of vision has occurred. We shall mention only a few of the symptoms; headache, a gnawing pain sensation in the eye, a patient may be awakened at 4 or 5 o'clock by headache, dark adaptation is poor, patients complain of inability to see in darkened areas. Patients may or may not complain of visual disturbances. Haloes around lights may be noted in times of increased tension but other conditions may cause this, hence the basic condition must be determined.

Visual field studies are absolutely essential and must be carried out at intervals with painstaking care and compared to previous fields. This is now considered by many to be the only accurate method to follow glaucoma patients. In passing it should be noted that elderly patients frequently complain of tearing and lachrymation.

We would like to stress that when a foreign body is removed from the cornea by any physician the instillation of atropine sulphate is a most questioned procedure. Attacks of glaucoma have been precipitated by its use. Generally speaking, before any drug is used to dilate the pupil, the ocular tension should be known, and subsequent to mydriasis miotics should be used.

Patients with glaucoma must receive careful, firm, and considerate advice. They should be encouraged to lead normal lives. They may read, sew, watch TV (with good illuminations), attend picture shows (under certain conditions). There are many drugs used to treat glaucoma. Pilocarpine is the usual drug of choice.

The patient must see his physician at intervals and be closely watched. To start a patient on miotics and not accurately do all other examinations and know the patient as a whole, does not constitute adequate care for these cases. They must be observed during all phases of their activity, work, play, illnesses, and the tragedies of life.

We would like to urge that Glaucoma Detection Clinics be held at different places in South Carolina in connection with the various

medical societies and the various health agencies. There are leaflets available to all the physicians attending the present meeting and also a Glaucoma Detection Clinic is being held. We would urge you to all drop by and have your tension taken.

(Remarks of Dr. Stokes, following completion of the symposium)

Thank you Dr. Macdonald. You can see then

that mechanical blockage of aqueous in the eye, due to many causes, is the one big cause of glaucoma and the treatment is to relieve that mechanical obstruction. If there were in this room any over forty years of age, I don't say you are, but if all of you were then you could expect to find about four cases of undiagnosed glaucoma in this group of people.

## KERATODERMA OF THE PALMS AND SOLES

### A CASE REPORT

R. NEAL SCHNEIDERMAN, M. D.

U. S. Naval Hospital, Beaufort, S. C.

#### *Introduction*

**K**eratoderma of the palms and soles may occur in a variety of clinical patterns. It may be acquired or inherited; diffuse, punctate, or localized; mild or severe. It is a condition characterized by a thickening of the horny layer of the palms of the hands and soles of the feet and is usually symmetrical. It most commonly extends to the wrists and to the sides of the fingers. The heredity pattern<sup>1</sup> may be dominant or recessive, or it may be inapparent because of paucity of genealogic information. Some types may have special racial features such as Mal de Meleda.<sup>2</sup> The patient with keratoderma of the palms and soles may have other associated congenital defects and there may be members of the family who have congenital defects. Keratoderma of the palms and soles may be mildly bothersome or severely debilitating. Pain from fissuring and consequent inability to use the hands or to walk may occur. The disability may be so great as to require excision and grafting of the involved areas.<sup>3</sup>

The following cases are presented because of the excellent opportunity afforded to demonstrate the pattern of inheritance in this family.

#### *Case Presentation*

Case 1. The patient is a 20 year old white female who since birth has had a thickening of the skin of

The opinions contained herein are not to be construed as those of the U. S. Navy.

The author describes a family with inherited keratoderma and discusses three members of the group.

the palms and soles. Her skin elsewhere is normal, and no abnormalities other than the keratoderma were found on physical examination. The condition presents little difficulty to the patient in the performance of her duties as a housewife except during the winter. During the cold months of the year, the palmar surfaces of the hands become dry and develop occasional painful fissures. These generally heal in a few days following the use of petrolatum. Treatment was attempted by means of a 10% potassium hydroxide lotion,<sup>2</sup> salicylic acid plasters,<sup>2</sup> ultrasound at 0.5 watts per square cm. for one minute daily for five days,<sup>4</sup> and 0.2% popophyllin ointment. None of these methods was of any value to the patient.

Case 2. A two year old white female, the daughter of case 1. The patient was born with a thickening of the skin of the palms and soles. There were no other abnormalities noted on physical examination. There has to date been no fissuring of the involved areas, and the manual dexterity is normal for the patient's age.

Case 3. A one year old white male, the son of case 1. The patient was born with a port wine hemangioma involving approximately one half of the right leg. There were no other abnormalities noted on physical examination.

#### *Discussion*

The opportunity was presented to study a large family group of four generations, some of the members of which possessed the trait of keratoderma of the palms and soles. A chart was devised to develop the relationships and

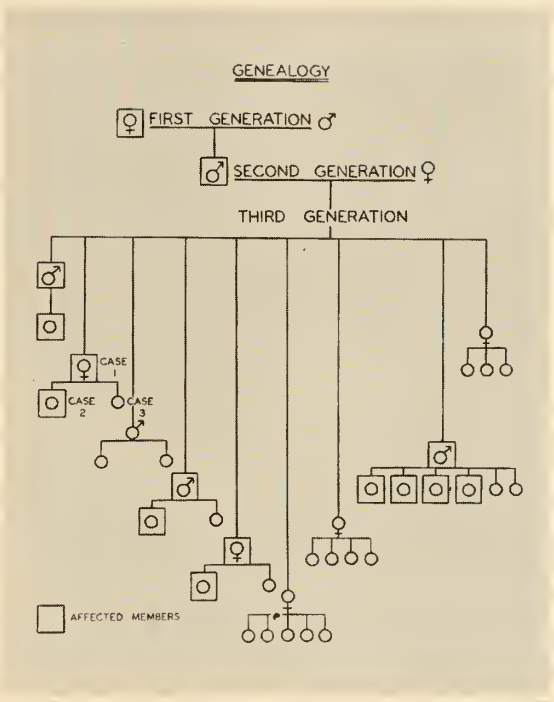
occurrence of this trait. The following facts may be derived from this chart.

1. Of the nine third generation offspring, five were affected with keratoderma, and four were not.
2. Of the thirteen fourth generation offspring who had one affected parent, eight were affected with the keratoderma.
3. Of the fourteen fourth generation offspring who had no affected parent, none was affected with the keratoderma.

On the basis of these facts, it may be stated that the trait of keratoderma of the palms and soles in this family is inherited by a simple dominant gene. It may be predicted that approximately one half of the future offspring with one affected and one normal parent will have the condition and that none of the offspring of the unaffected parents will have the trait.

Summary

A family carrying a simple dominant gene



for keratoderma of the palms and soles is presented.

REFERENCES

1. Michael, J. C.: Keratoderma disseminatum palmaris et plantaris. Arch. Dermat. & Syph. 27: 78, 1933.
2. Ormsby, O. S., & Montgomery, H.: Diseases of the Skin. 8th ed. Philadelphia, Lea & Febiger, 1954.
3. Wynn-Williams, D.: Plantar keratoderma treated by split-skin grafts. Brit. J. Plast. Surg. 6: 123, 1953.
4. Hassard, G. H.: Old and new concepts in treatment of warts. Illinois M. J. 114: 212, 1958.



## PRESIDENT'S ADDRESS TO ANNUAL MEETING

Joseph P. Cain, Jr., M. D.

During this year I have traveled over 10,000 miles and have talked to doctors in all counties of the state, either by meeting the County Society individually or by meeting with them at District gatherings.

The attendance was very good on the average, and I estimate I talked to one of every two doctors in the State. There was 100% attendance in one county, and over 90% in several.

Many points of interest were noted, some of which will be brought out as I go along. One county started meeting before eating. The amazing thing was that after refreshments everyone seemed to be in a jovial and acceptable mood — even the speech seemed more fluent — to the speaker. However, this has also been known to work just the opposite at times. Also I learned that to end a meeting on time you simply have someone cut off the lights — it works like a charm.

One county, to increase attendance, requires attendance at 50% of meetings — if not, membership is revoked, which also takes away hospital privileges. After being reinstated, on second offence, the member is fined \$50.00 in addition.

Many small counties are in difficulty so far as adequate nurses to staff the hospitals are concerned. They have little sympathy for the larger centers, whose greatest problem is not whether or not they can get nurses but only that competition between other hospitals in the county keeps the salaries on an upward spiral. The smaller community which does not have the cultural advantages and glamour to be found in the larger cities has a tough time bringing nurses to live in its small town at any price.

It is undoubtedly true that these small communities are dependent almost entirely on local girls, some of whom have come home after having trained elsewhere, and on older graduates of the local Nursing School which now has been forced out of existence.

The smaller community hospitals feel that their larger colleagues deserted them when

the chips were down several years ago, at which time the nursing law was amended to require longer affiliation with larger hospitals. For the average school it meant that these students who already affiliated 9 to 12 months, would be gone for 3 or 4 months more, or about half their training period. Since this obviously was not economically feasible, the nursing schools had to close.

Nineteen Nursing Schools twenty years ago graduated 307 nurses. Fifteen Nursing Schools last year graduated 308 nurses. However, most of the 55 hospitals in the state twenty years ago have now expanded and 19 new ones have been constructed. In all, the total number of hospital beds and admissions have more than doubled.

What is the answer? Since an adequate number of R.N.'s is not available they must be used in supervisory and administrative capacities. The practical nurse is coming into her own. A school for practical nurses is more economical, requires much less training time, and is in line with modern educational methods where specialists are trained as experts in certain fields.

We find these nurses working in operating rooms, recovery rooms, general supply, as well as doing most of the general nursing care. Some hospitals even use them to take charge of medications.

In some respects we have done the Registered Nurse, our closest colleague, a great disservice. From all practical standpoints, we have allowed her to legislate herself into a minority position. The nursing personnel of hospitals generally runs less than half R.N.'s, the remainder being practical nurses and aides. What has been done, is done! We would not have the standards lowered. However, we must use our limited supply of R.N.'s as seems most feasible and increase our practical nursing personnel.

This is the only solution for the smaller hospitals, many of whose R.N.'s now are grandmothers — and when this limited supply is exhausted — what then?

Unfortunately, the liaison between the nursing and medical profession is not what it once was. More and more our nursing associates are expressing viewpoints on the socio-economic aspects of medical care that are contrary to those of the medical profession. Without belaboring this point, I cite one example—The American Nursing Association has approved Forand-type legislation, and up to this time The South Carolina Nursing Association has felt that it should go along the same way.

*Civil Defense*

Progress in Civil Defense has been very gratifying. A full time adviser to physicians and hospitals has been appointed. Sixteen mobile hospitals have been set up over the State and fully staffed. In communities where the medical manpower is limited, the hospital is staffed by physicians from neighboring counties.

*Society Interest*

Interest within the County Societies was very significant. Most all counties were organized and many are “chafing at the bit” — ready to sink their teeth in whatever problem presents itself. Many smaller units show signs of being stronger. In a few of the counties interest has ebbed; we hope this is a temporary state of affairs and that soon they will regain their zeal and influence shown in the past.

*Discipline*

There is evidence that the county societies are cognizant of their responsibility in regards to regulating irregular practices within their jurisdiction. Several county societies have been active in this regard. It is commendable that they are striving to keep their own house in order.

*Liaison—Department of Public Welfare*

A committee has been appointed to work with the Department of Public Welfare. Many problems concerning physicians present themselves in welfare work. This committee is in a position to do a great deal of good.

*Legislation*

We have actively supported a bill recommended by Mr. Arthur B. Rivers, head of the Department of Public Welfare, to implement the Kerr-Mills Bill for the care of aged people with an income of \$1,000 or less. It is urgent

that we continue to give our wholehearted support to the implementation of this bill, rather than subject ourselves to the alternative—an amendment of the Social Security System.

The present Naturopath Bill cropped up again this year. Apparently we will have this type of legislation to contend with each year, and should be continually on the alert. Our County Delegates to the General Assembly have to be reminded continually about our problems in this regard. Recently, when a vote was lost by 55 to 40—many of the 55 were new members who did not remember the background of our battle in 1956. The other 40 were veterans, who remembered and stood pat. We must keep up liaison with our County Delegates and meet with them from time to time to let them know how we feel. As a general rule, most County Delegates like to vote as their constituents wish, and will think a long time before voting for something strongly opposed by their County Medical Association. The proof of this was the reversal of the above vote on third reading and after the physicians had explained their views to the Local Delegates.

*Social Security for Doctors*

Social Security for doctors has been injected into almost every discussion that we have had during the year. There continues a great deal of interest in this subject, both pro and con, by the physicians throughout the State.

Two years ago a poll of the Association showed 55% of physicians to be against compulsory inclusion under Social Security, and 45% were in favor of compulsory inclusion. Whether or not this percentage has changed at the present time I do not know. However, one or two counties have passed resolutions which are to be brought before the Association, requesting another poll of its members on the subject.

*Liaison Committee—State Institutions*

There are several areas of activity concerned with state supported institutions which are directly the concern of physicians and the Medical Association. Liaison with these institutions could be most helpful. I would strongly recommend that our Association consider appointing a committee for liaison with

state institutions, which would be concerned with problems coming up between the Medical Association and its relation with all state institutions, and would include the State Hospital, State Park, the Medical College of South Carolina and the new Alcoholic Rehabilitation Center. It is easy to foresee the advantage of such liaison.

#### *Physician's Image*

Many physicians still feel that the medical profession can do and say what it pleases and somehow public relations can make it acceptable. Nothing could be farther from the truth. Public relations is common sense. Good deeds and their proper interpretation are the fundamental precepts of effective public relations.

It is not enough for the individual physician to give tacit support to the efforts of his local and state societies, or to those of the American Medical Association. He must be more than a dues-payer if he wishes to preserve medicine's freedom to practice in its traditional way.

He must be the articulate voice of his profession, wherever he is. He must be dedicated to the well-being of his community. In matters of health, he must be willing to assume responsibility and discharge it like the expert he is. He must be citizen as well as doctor, plaintiff's attorney for his patients, missionary for the individual and for the individual's rights.

The image of medicine is simply an ex-

tended likeness of the physician and his colleagues, reflected in the mirror of public opinion. It can be warm and sympathetic or cold and impersonal.

Actions speak louder than words, and words are without value unless they are backed up by deeds. The image of our profession is the reflection of our substance and not our shadow.

In conclusion join with me in the Physician's Prayer:

Lord, Who on earth didst minister  
To those who helpless lay  
In pain and weakness, hear me now,  
As unto Thee I pray.  
Give to mine eyes the power to see  
The hidden source of ill,  
Give to my hand the healing touch  
The throb of pain to still.  
Grant that mine ears be swift to hear  
The cry of those in pain;  
Give to my tongue the words that bring  
Comfort and strength again.  
Fill thou my heart with tenderness,  
My brain with wisdom true  
And when in weariness I sink,  
Strengthen Thou me anew.  
So in Thy footsteps may I tread,  
Strong in Thy strength alway  
So may I do Thy blessed work  
And praise Thee day by day.

Amen

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*Ammonium intoxication following massive gastrointestinal hemorrhage*, by R. S. Wilson, F. T. Wallace and C. S. Finney (Spartanburg). *Tri-state M. J.* 8:5, Oct. 1960.

In the patient with cirrhosis who has a massive gastrointestinal hemorrhage and shows evidence of coma or abnormal cerebral behavior, it must be assumed that these cerebral manifestations are the result of increased ammonia levels in the blood.

The authors report a patient who after a massive gastrointestinal hemorrhage developed abnormal cerebral behavior consisting of lethargy, confusion and ultimately coma and convulsions.

In cirrhosis, the circulation of the portal vein is obstructed by scar tissue. The blood is shunted into the hepatic vein. The detoxifying effect of the liver cells is lost.

A large amount of blood accumulates in the gastro-

intestinal tract following hemorrhage from esophageal varices or a penetrating duodenal ulcer. As a result of bacterial enzymatic action, ammonia is produced from the blood. Accumulation of ammonia and similar substances has a toxic effect on the cerebral cells, and cerebral manifestations or coma develops.

There are three measures which aid in the management of such cases. The first is the use of a purge which removes the large quantity of ammonium-producing blood from the gastrointestinal tract. The second is giving of a broad-spectrum antibiotic to decrease the bacteria concentration within the bowel and cut down on the formation of bacterial enzymes. The third is administration of sodium glutamate for its direct ammonium binding power to lower the level of ammonium concentration in the blood.

An illustrative case is presented.





## President's Page

Another splendid meeting of the South Carolina Medical Association has concluded, and for those that were unable to attend this meeting, I hope that they will avail themselves of the proceedings of the House of Delegates that will be printed in the *Journal of the South Carolina Medical Association*. Some of the articles that were presented at the meeting will be carried also, but as you know, many of these presentations are given by notes, and are therefore unavailable for reproduction. One of the highlights of the program was the panels that were held on the afternoon of Thursday. These were extremely interesting and were well attended, and I can assure you that it was most gratifying to the officers and the scientific committee to see as many in attendance. Both rooms were filled until the last. When the members react to a meeting as they did at this last meeting, it most certainly presents a challenge for next year, and I certainly assure you that the committee on scientific program will shoot high, in order that we may have your presence in 1962.

I hope that you will read with care the proceedings of the House of Delegates in the *Journal* when they are published, and that you will file this for future reference. There will be many things that your society should take action upon, and there will be many things that you may want to pursue further at the next meeting. In any case, it will keep you up to date as to what your State Association is doing, and will give you, as a member, a chance to study such action, so that you may endorse, amend or reject. You, at the county level, through your county society, have this prerogative. Use it, but use it for the betterment of the practice of medicine and for better public relations with our patients and allied personnel.

Keep up your interest in organized medicine, and be prepared at all times to lend your help in its advancement.

Charles N. Wyatt, M. D.

# Editorials

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## THE DRUG INDUSTRY

In the hoppers of both the Senate and the House of Representatives there is the ammunition for a double barreled threat to the drug producers. Senator Kefauver is ready with his coon skin cap and the material for a tough attack on the industry. In effect, these proposed laws would tighten the anti-trust regulations, would make licensing of patented drugs mandatory, and would give the Food and Drug Administration much more privilege and responsibility in policing manufacturing and advertising.

Doctors will be furnished under such law with better information on the good and bad features of drugs, and the department of HEW would furnish information to physicians. There is also provision to simplify generic names and reduce the number of patented drugs by eliminating all which are not distinctly different from others. Inspection of plants and examination of files and personnel would be a function of the FDA.

Whether the present state of the drug industry warrants all of these measures is questionable to many people. The regulations proposed would probably drive some of the smaller manufacturers out of business and if the very radical provision for limitation on the patent rights of drugs is passed, reducing the seventeen year period to a three year limit, there would probably be a great effect on the desire of manufacturers to carry out expensive research and to investigate the development of new drugs.

While it is doubtful that this legislation will be enacted this year, there probably will be long and elaborate hearings before anything is accomplished. The pharmaceutical manufacturers are well alerted and probably prepared for much rebuttal to the charges presented now and in the past by Kefauver and his allies. Certainly some of these charges appear to be rather strange, and the drug manufacturer should be given every chance to pre-

sented his side of the picture. His contribution to medicine in recent years has been too great simply to brand him as a profiteer.

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## DAY AFTER DAY, JOURNAL AFTER JOURNAL

"Four other oysters followed them,  
and yet another four;  
and thick and fast they came at last,  
and more, and more, and more."

Substitute "journals" for oysters and you have the present day picture. But there seems to be very little conservation in this plan, for there are no walruses or carpenters to eat up the surplus journals.

This dull thought arises from the advent of two new journals on the bibliographic scene, and no doubt they are worthy and needed publications, but the daily multiplication of medical magazines makes one wonder whether there should not be some daily subtraction at the other end of the line. Even in his own special field, a doctor finds it hard to keep up with the multiple writings on his particular subject.

This is not meant to be derogatory to the two new journals coming to the desk. *The Journal of Surgical Research* is a handsome publication, well protected by eminent authorities on the editorial board, and probably filling a need for consideration of the more philosophical aspects of surgery instead of the discussion of purely technical activities. If the first number is a proper prototype of those to come, it should be a journal of high standing and popularity in the surgical world.

Another new journal is *The Journal of the Children's Asthma Research Institute and Hospital*, emanating from an institution at Denver. It proposes to attempt to integrate the several phases of consideration in the asthmatic state which are required for a proper study of the disease. It will combine material on social, cultural, neurological, medical, and psychological experiences and

will offer particularly edited transcriptions of conferences on current problems and investigations. Its editorial board also is impressive, and there would seem to be reason to think this quarterly periodical will produce much useful information and thought.

Let us hope that these newcomers will have  
"a pleasant walk, a pleasant talk,  
along the briny beach:"

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### **SPEAKINGS AND RECORDINGS**

It has been the opinion of this editor that some of the best reading material that can be carried in a state Journal is that which emanates from panel discussions at our annual meeting or from meetings of county medical societies or other similar sources. Many of the better journals carry this kind of material, and apparently it is justly popular when it is properly presented.

A circular on the desk gives what is to us a new name for such material, that of "raw data", verbatim recordings as "living texts of noncontroversial events." To these thoughts this *Journal* willingly agrees.

Obviously such reports have to be edited, both by the speaker and the editor of the journal. Otherwise an amazing conglomeration of hems and haws and unfinished sentences and ungrammatical statements and a great many undesirable things emanate from the transcription. In those published reports which we occasionally read, the conversation flows as smooth as milk, the speaker never hesitates for a word; the construction of sentences is an admirable thing to hear.

What has gone wrong with those transcriptions that we have attempted to do? After the secretary labors to produce some sort of consecutive English from the machine, the editor has to do his best to bring what he considers his own personal order out of the

speakers' chaos, after much effort to make the completed product sound something like what the editor thinks the speakers intended to say, and after a trial of using the proper technical terms belonging to some foreign specialty the editor is left with something that looks to him reasonably publishable. With a sigh of relief and high anticipation he sends his copies off to the speakers. For days, for months, for years, almost, he waits to have a reply. One participant holds up the whole works. Most participants cannot possibly conceive that they have said anything like what has been given them as a record of their vocalizings. The whole scheme of producing a fine piece of informative work runs closer and closer to the rocks and finally founders on the persistent procrastination of the original producers.

We like these reports very much — when we can get them. Perhaps other people are more adept at using winning ways and achieving results.

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### **THE SURGEON ECLIPSED**

Let us take nothing away from the glamour of the surgeon. Somebody has been doing it.

When the disaster of cardiac arrest struck the patient on the operating table, the surgeon could make dramatic and frequently successful efforts at resuscitation by massaging the heart through a proper incision. Now if announcements are not premature, it seems that people at Johns-Hopkins have found that closed-chest cardiac massage is no more difficult to administer than is artificial respiration, and certainly much less difficult to perform and much safer than open chest resuscitation. The patient is treated more quickly, and the danger of thoracotomy is avoided.

Sic transit gloria chirurgiae.



**JAMES H. GRESSETTE, M. D.**  
**PRESIDENT-ELECT**

James H. Gressette, M. D., President-elect of the South Carolina Medical Association, is a native of St. Matthews, South Carolina, where he was born in 1913 and where he completed his secondary school education. He was graduated from the University of South Carolina in 1934 and from the Medical College of South Carolina in 1938. He served his internship at the Macon Hospital, Macon, Georgia; was a resident and later an associate in ophthalmology and otolaryngology at the Gill Memorial Hospital in Roanoke, Virginia. Dr. Gressette is a licentiate of the Board of Ophthalmology and the Board of Otolaryngology, is a member of the American College of



Surgeons and of the International College of Surgeons. He has been active in the medical societies of the state, having held numerous offices in them, the most recent being Chairman of the Council of the South Carolina Medical Association of which he was a member as representative of the Eighth District.

Dr. Gressette has been practicing his specialties in Orangeburg since 1945 where he is currently associated with Dr. John B. Rembert.

Dr. Gressette is married to the former Miss Mary Sims of Orangeburg. Their oldest daughter, Miss Mary Sims Gressette, attends Converse College. Their two younger daughters and James Hill Gressette, Jr. attend the Orangeburg schools.

In the affairs of his community Dr. Gressette has taken an active part being a past president of the Orangeburg Chamber of Commerce, a director of the Industrial Development Company, the Bank of Orangeburg and the Rotary Club. He is Chairman of the Board of Deacons of the First Baptist Church of Orangeburg.

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**WALLIS D. CONE, M. D.**  
**VICE-PRESIDENT**

The new vice-president of the South Carolina Medical Association, Dr. Wallis D. Cone, was born near Dunbarton, South Carolina, on May 20, 1915. He attended the Williston-Elko schools, Wake Forest College and was graduated from the University of South Carolina in 1936 and from the Medical College of South Carolina in 1940, where he was president of the student body in his senior year. He is a member of Phi Rho Sigma and A.K.K. After internship at Roper Hospital he spent 52 months in the armed services, 30 of which were at the Station Hospital, Fort McClellan, Alabama, on the G. U. Service. Eighteen months were in the European Theater with the 3rd Medical Battalion, 3rd Infantry Division. He was awarded a Bronze Star Medal for meritorious service and five battle stars, one for D-Day landing in Southern France.

In 1940 Dr. Cone married Miss Margaret Dickson of Manning. They have two sons, Dicks, 18, now at Clemson, and Wells, 16, in high school in Sumter.

Dr. Cone served a residency in urology at Roper Hospital from January 1946 until June 1948 and began the practice of this specialty in Sumter in July 1948. He is a member of the American Board of Urology, American Urological Association, Southeastern Section



American Urological Association, the American College of Surgeons and the AMA. He is a member of the executive committee from South Carolina to the Southeastern section of the American Urological Association. Dr. Cone is a member of the staff of Toumey Hospital, Sumter, and a consultant at Shaw Air Force Base.

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Officers for 1961-62 elected at the Annual Meeting in Charleston in April were:

Dr. J. H. Gressette, Orangeburg, president-elect

Dr. Wallis D. Cone, Sumter, vice-president

Dr. Robert Wilson, Charleston, secretary

Dr. Howard Stokes, Florence, treasurer

Dr. Joseph P. Cain, Jr., Mullins—delegate to AMA—2 yr. term

Dr. Frank C. Owens, Columbia—alternate delegate to AMA—2 yr. term

*Councilors*—3 yr. terms

Dr. A. F. Burnside, Columbia—2nd District

Dr. J. M. Brewer, Kershaw—5th District

Dr. Joseph D. Thomas, Denmark—8th District

*Members of Mediation Committee*—3 yr. terms

Dr. William H. Bridgers, Columbia—2nd District

Dr. Ripon W. LaRoche, Camden—5th District

Dr. James L. Wells, Orangeburg—8th District

*Member of Benevolence Fund Committee*—3 yr. term

Dr. Thomas G. Goldsmith, Greenville

*Members of State Board of Medical Examiners* 4 yr. term

1st Congressional District, Dr. A. R. Johnston, St. George

3rd Congressional District, Dr. Wm. P. Turner, Greenwood

*Members of Hospital Advisory Council to State Board of Health*

Dr. Halsted M. Stone, Chester

Dr. T. C. McFall, Charleston



*New officers of the South Carolina Medical Association pictured from left to right: Dr. James H. Gressette, president-elect, Dr. Charles N. Wyatt, president, Dr. J. Howard Stokes, treasurer, and Dr. Robert Wilson, secretary.*



**BRUCE ALGER,**  
**Convention Speaker**

The speaker for the final banquet of the convention was Bruce Alger, the first Republican ever to represent Dallas County, Texas, in the House of Representatives of the United States. A graduate of Princeton, 1940, Mr. Alger began his business career with RCA Victor. Alger served overseas as a B-29 Commander, logging 2,500 hours and 23 combat missions, including many of the raids over Japan.

In 1954 Mr. Alger was elected to the United States House of Representatives in which he has since served on varied committees among which are Public Works, Interstate and Foreign Commerce and Ways and Means. His Congressional efforts have centered around the Hoover Commission recommendations, fiscal responsibility and the curtailment of the size and scope of federal government.

Mr. Alger spoke critically of the government's handling of foreign affairs with particular reference to the Cuban situation and foreign aid. He commented that the greatest struggle on the homefront is "the right to own property." He stated, "The threat of Socialism and Communism are one and I defy any straight-thinking economist to say differently." Mr. Alger thinks Congress should:

1. Strive for a yearly balanced budget.
2. Institute a tax reform which would permit a cut in every bracket of corporate and individual returns within a balanced budget.
3. Get the government out of business in competition with its own citizens.
4. Put labor unions under the anti-trust law.
5. Protect the sovereignty of the United States.

## **Minutes of Council Meeting Charleston, S. C.**

**April 25, 1961**

The first meeting of Council in conjunction with the Annual Meeting of the Association was held at the Francis Marion Hotel, on the morning of April 25, 1961. The meeting was called to order at 9 a. m. by the Chairman, Dr. J. H. Gressette. Members present were: Drs. Cain, Wyatt, Workman, Wilson, Stokes, Waring, Evatt, Burnside, Scurry, Booker, Brewer, Perry, Eaddy, Gressette, Weston, and Johnson.

The minutes of the meeting of October 26, 1960 were corrected to show that Council had previously approved appropriations of \$500.00 and \$800.00 for the Benevolence Committee, and were then approved.

The Treasurer's report for the year 1960 was presented by Dr. Stokes and accepted with the thanks of Council. On his recommendation, Council authorized the Committee on Investment to proceed with the investment of \$10,000 of last year's surplus, giving the Committee power to act in this regard.

Dr. J. P. Cain, Jr., President of the Association, suggested that the Chairman of Council be authorized to appoint a three man committee to study the possibility of providing scholarships, grants or loans to needy medical students and interns. He also suggested the appointment of a similar committee to study the salary scale of all employees and paid officers of the Association. Council approved both of these suggestions, referring them to the House of Delegates for appropriate action.

Dr. Cain then brought up the question of biennial reregistration of physicians, and noted that the Aiken County Medical Society had given considerable thought and study to this matter and had prepared a substitute resolution for presentation to the House of Delegates. Dr. Poda and Dr. Hamilton appeared before Council, presented their resolution, and spoke in its behalf. Council took no action in this matter, referring it to the House of Delegates.

The Secretary then presented his report which was received as information.

Dr. Cain reported to Council that a Committee had met with the Department of Public Welfare regarding proposals for implementation of the Kerr-Mills Bill, and that some members of this committee had likewise appeared before the Ways and Means Committee of the House of Representatives in its behalf.

Dr. Henry W. Moore, Chairman of the Committee on Accident Prevention, presented the report of his committee to Council along with certain proposals for safe driving measures. These included visual tests for driver reregistration, and participation in the Cornell medical study as to the cause of accidents so that data would be available to make cars safer. A lively discussion ensued, with Dr. John Brewer presenting comments against the acceptance of this report, and Dr. William Weston, Jr., arguing in its



favor. A motion to table was lost, and on motion of Dr. Weston, Jr., Council accepted and approved the proposals by a vote of ten to four.

Dr. J. P. Cain moved that the Secretary be directed to send a telegram to the Speaker of the State House of Representatives, noting that the Council of the S. C. M. A. unanimously opposes the passage of the "eclectic" medicine bill up for third reading in the House. This motion was passed, and the Secretary proceeded as directed.

Dr. Cain then presented a resolution to change the By-Laws, so that the Committee on Scientific Program should consist of three members, one appointed for a one year term, one appointed for a two year term, and one for a three year term, with succeeding appointments for three years, so that some continuity of membership on this committee would be effected. It was moved that Council recommend the passage of this resolution to the House of Delegates and this was carried.

Dr. Cain suggested approval of another change in the By-Laws, to establish an Advisory Committee to the Department of Public Welfare. This Committee would consist of nine members, one from each District of the Association, three members to be appointed for a one year term, three members for a two year term and three members for a three year term, with subsequent appointments for three years. It would be the duty of this Committee to consider, when requested, any matters concerning the practice of members of the Association involving patients under the auspices of, and programs of the Department of Public Welfare, and to act as a Liaison Committee between the Department of Public Welfare and the South Carolina Medical Association. This was likewise approved as the recommendation of Council to the House of Delegates.

Dr. C. W. Wyatt then spoke on Civil Defense, and suggested the appointment of a Committee on Emergency Medical Care. This committee would consist of five members, nominated by Council and elected by the House of Delegates, one for a one year term, one for a two year term, one for a three year term, one for a four year term and one for a five year term, with subsequent appointments for five years; the Committee would be charged with responsibility for study, planning, and advising the Association with respect to the medical phases of civil defense and disaster medical care preparedness, and to act as a liaison body between the medical profession of South Carolina and the Director of Civilian Defense. Council approved this as a recommendation of Council to the House of Delegates.

Dr. William Weston, Jr., acting chairman of the Committee on Civil Defense, then presented his report covering certain aspects of Civilian Defense and suggesting that the County Health Officer be placed in charge of each emergency hospital. This report was received as information and the Secretary was directed to send it to the Committee on Emergency Medical Care for consideration.

Dr. William Weston, Jr. then spoke on the proposed adoption bill, Dr. Cain reported that the Legislative Committee had approved this proposal. It was then approved by Council.

Dr. J. I. Waring gave his report as Editor of the Journal which was received as information with the thanks of Council. He then spoke in his capacity as Director of Public Relations and the activities of this department, which was likewise received as information.

Dr. G. D. Johnson then presented his report as President of the South Carolina Medical Care Plan, which was received as information.

Dr. A. F. Burnside presented to Council a recommendation to investigate the feasibility and practicality of establishing a First Aid Center at the State House while the Legislature is in session. It was moved that this matter be referred to the House of Delegates with the recommendation that an ad hoc committee be established for this purpose.

Dr. J. H. Gressette then presented a report from Dr. Thomas Parker regarding the publication "The Challenge to Socialism" which requested financial support. It was moved to call this to the attention of the House of Delegates and suggest that Dr. Parker be asked to present the matter directly to the House.

Dr. Gressette spoke on the implementation of a Charleston County resolution adopted last year, establishing District Committees to serve as a medical fact finding committee in all cases of alleged professional negligence.

Dr. Gressette then presented the report of the Mediation Committee with recommendations which were accepted and approved.

The Secretary brought up the question of defraying the expenses of a Delegate from the Medical College to the Annual Meeting of the Student AMA; on motion Council directed that the Association be responsible for the expenses of one delegate each year, in the same amount as is covered by the Medical College for the expenses of a second delegate.

Dr. J. M. Brewer spoke on the necessity for early information regarding pending legislation to all concerned, and Dr. Burnside suggested that the Executive Secretary be directed to notify every member of Council, in addition to county secretaries, when any controversial legislative action is expected. Council approved these recommendations.

Council was then adjourned at 1:15 p. m.

Respectfully submitted,

Robert Wilson, M. D., Secretary

### **Minutes of Council Meeting April 26, 1961**

Council reconvened at 8:30 a. m. on April 26, 1961. The meeting was called to order by the Chairman, Dr. Gressette. Members present were: Drs. Wyatt, Wilson, Waring, Weston, Johnson, and all members of Council.

Mrs. George Smith, President of the Woman's Auxiliary to the South Carolina Medical Association,

appeared before Council and gave her annual report.

Dr. W. A. Smith, Chairman of the Benevolence Committee, gave his report to Council on the activities of his committee, and requested an appropriation of \$1000.00 for the next year.

Council then approved the nominations of the following, to be presented to the House of Delegates. For Treasurer, Dr. J. Howard Stokes. For member of the Benevolence Fund Committee, Dr. T. G. Goldsmith. For the Mediation Committee, Second District, Dr. G. A. Poda of Aiken and Dr. W. H. Bridgers of Richland; Fifth District, Dr. Halsted Stone of Chester and Dr. I. Ripon LaRoche of Camden; Eighth District, Dr. Henry Gibson of Barnwell and Dr. James Wells of Orangeburg. For the Committee on Emergency Medical Care, one year term, Dr. William Herbert of Spartanburg; two year term, Dr. Charles May of Bennettsville; three year term, Dr. Graham Shaw of Columbia; four year term, Dr. Robert Solomon of Moncks Corner; five year term, Dr. Raymond Ackerman of Bethune.

Council was then adjourned.

Respectfully submitted,  
Robert Wilson, M. D., Secretary

### Minutes of Council Meeting April 27, 1961

Council reconvened at 8 a. m. on the morning of April 27, 1961. Dr. J. H. Gressette presided; members present were Drs. Cain, Eaddy, Perry, Thomas, Burnside, Waring, Brewer, Fleming, Wyatt, Scurry, Evatt, Booker, Workman, Wilson and Mr. M. L. Mcadors.

Council directed that the Executive Secretary, the President, and the Chairman of Council be given authority to proceed with making arrangements for the next Annual Meeting of the Association, preferably at Myrtle Beach, S. C., the second week in May 1962. These officers of the Association were given power to act in this regard.

The following were elected as officers of Council: Chairman, Dr. John M. Brewer; Vice-Chairman, Dr. A. F. Burnside; Clerk, Dr. W. L. Perry.

A motion to support Dr. Charles Wyatt in his work as President of the Association during the coming year was adopted unanimously.

Council then adjourned, to be called again for the fall meeting at the call of Chairman.

Respectfully submitted,  
Robert Wilson, M. D., Secretary

### ALUMNI ASSOCIATION OF THE MEDICAL COLLEGE

At the annual meeting of the Alumni Association held in connection with the recent meeting of the South Carolina Medical Association, the following officers were elected:

Dr. Henry F. Ross, Greenville, president  
Dr. Charles B. Hanna, Spartanburg, vice-president  
Dr. John May, Bennettsville, president-elect

### Directors

1st district—Dr. Warren S. Smith, Walterboro

4th district—Dr. Basil Manly, IV, Greenville

7th district—Dr. James E. Bell, Jr., Sumter

### Executive Council — House of Delegates

Dr. John M. Brewer, Kershaw, chairman

Dr. Alfred F. Burnside, Columbia, vice-chairman

Dr. William L. Perry, Chesterfield, clerk

### Committee on Emergency Medical Care

Dr. William C. Herbert, Jr., Spartanburg—1-yr. term

Dr. Charles R. May, Bennettsville—2-yr. term

Dr. J. Graham Shaw, Columbia—3-yr. term

Dr. Robt. S. Solomon, Moncks Corner—4-yr. term

Dr. Raymond E. Ackerman, Bethune—5-yr. term

### HAZARDOUS SUBSTANCES

The United States Congress on July 12, 1960 enacted the Federal Hazardous Substances Labeling Act which will be handled by the Food and Drug Administration. This law requires manufacturers to label household substances which are toxic by ingestion, inhalation, or absorption; corrosive; irritant; strong sensitizers; flammable; radioactive (if named by regulation), or pressure generators, if such articles may cause injury or illness from customary or reasonably foreseeable use, including ingestion by children. The law will not allow the importation of improperly labeled chemicals but does not cover exportations.

This law for the protection of public health would not go into effect for six months after passage, or up to 18 months if the Secretary of Health, Education and Welfare preferred to delay it that long.

This new law is an indirect outcome of the Academy of Pediatrics sponsorship of Poison Control Centers.

### The Lancaster Future Doctors Club

In the effort to interest promising boys in the study of medicine, Future Doctors Clubs have been formed in a number of places. Mrs. Esther Touchberry, superintendent of the Marion Sims Memorial Hospital at Lancaster, has been kind enough to furnish *The Journal* with some notes on the method of organization there. It is hoped that similar efforts may be developed in other hospitals.

In the Spring of 1959, just about 6 months after the activities of the Future Nurses Club and the Junior Gray Lady Corps were recognized throughout the community, a few High School boys went to the Director of Red Cross and asked if there were some similar program that could be worked out for them.

For the first class, only two boys showed up. By the next summer, seven additional boys attended classes which were given in the classroom in the Nurses Home and were assigned regular duties at regular hours during the summer months in the hospital.

These classes consisted of simple nursing procedures, like baths, TPR's, serving trays, cleaning units, ethics, and personal hygiene. Orientation classes were given in the Emergency Room and on the male

ward. The boys were assigned to work 3 days each week for 4 hours each day. They were allowed to wear white jeans and shirts with the Red Cross insignia on the sleeves.

Most of these boys are seriously interested in studying medicine. The staff physicians have taken a keen interest in the work these boys are doing. We have problems at times with the physicians wanting to take the boys to places in the house other than where they have definitely been assigned.

The boys must have classes before coming on the halls. They must have definite chores assigned, and they must have definite days and hours on which to report. We try to arrange this so that the Director of Volunteers can always supervise their activities.

When school began in September, 1960, the Future Doctors Club was added to the list of clubs at the Senior High School. It is combined with the Future Nurses Club, under the direction of the Education Director of the Hospital. These clubs meet the first Wednesday of each month at 8:30 A. M. for 45 minutes at a permanently assigned location.

The program this year is "Our Community Health and Safety."

Guest speakers have been invited, and the students' programs thus far have been: Public Health; Civil Defense; First Aid; Safety (a movie).

The following observances are important:  
Definite Assignments (not free to run over the house)

Definite hours (cannot come when they have nothing better to do.)

Definite days (must plan a month ahead—according to activities and schedules at home)

The parents are very pleased to have the boys do this work. In fact, one man, who is a Board Member, paid his grandson for all of the time he spent in the hospital. He and the parents thought this was a far better way to spend vacation than in a car or bumming around town.

At the present time, there are seven boys in this club. Requirements are:

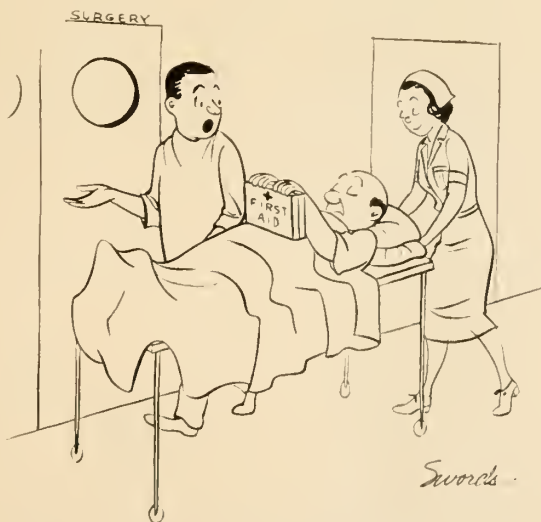
Junior or Senior in High School

Consent of parents and Guidance Counselor

Scholastic average of 85.

Our local Executive Director of the Red Cross was the first person these boys approached, and, for that reason, we have cooperated with the Red Cross to the extent of using the Red Cross insignia for the uniforms. Other than Red Cross orientation classes, the club is actually a High School club, and functions exactly as the Future Nurses Club. No doubt, it would have been better to have had this club sponsored by the Medical Auxiliary, but, at the time the boys became interested, the Medical Auxiliary had not then assumed the role of sponsorship for the Future Nurses Club.

One former member of our Future Doctors Club entered Pre-Medical School last September. At least two members in the present club will enter Pre-Medical School this September.



*"I wish you'd show more confidence in our facilities, Mr. Peabody."*





# BLUE CROSS . . . BLUE SHIELD



## Pennsylvania Commissioner Tells Blue Shield To Loosen Ties With State Medical Society

HARRISBURG, PA. — Three years ago the insurance commissioner of Pennsylvania, Francis R. Smith, stunned Blue Cross and hospitals here with an adjudication that told them in specific terms what to do about overutilization — or else.

At the time, there were few cheers for his efforts. Caught off balance by this public declaration, prepayment and association executives across the country instinctively ducked and threw the first rocks they had handy. Amidst denials that there was proof of overutilization and charges that the commissioner had exceeded his authority, Blue Cross and hospitals here followed orders and, among other things, established review committees on hospital admissions and length-of-stays at a time when such committees were curiosities, like whooping cranes. The result has been an impressive program against overutilization that has been adopted in many other regions.

Last month Commissioner Smith dropped the other shoe, and it landed squarely on Blue Shield. Moving in where most laymen fear to tread, he issued a new, sternly worded adjudication that, in the words of one Pennsylvania official, "made his Blue Cross adjudication look like a pat on the back."

The occasion was a request for an increase of 26.1 per cent in subscription rates for Blue Shield (Medical Services Association of Pennsylvania) surgical and medical-surgical coverage plans. The commissioner cut the increase to 21.3 per cent and then approved it, but not before lashing out at abuses of Blue Shield benefits and weaknesses in the organization's structure. Alarmed by dangers he saw in the close ties between Blue Shield and doctors, the commissioner recommended that the state law be amended so that it will no longer be necessary to have a majority of physicians on the board of Blue Shield.

"Blue Shield is not the doctor's plan, it is the public's plan," he wrote.

At present, he noted, Blue Shield is "more responsive to the views of doctors and the views of the Pennsylvania Medical Society than to the views of any other group."

The subordination of initiative and policy by Blue Shield to the medical society, he warned, is symptomatic of a serious condition that will hinder Blue Shield plans in meeting what he described as "the greatest challenge of their history."

In addition to paying attention to physicians instead of the public, Blue Shield has also failed to meet its responsibilities in eliminating overutilization of services, according to Mr. Smith.

The commissioner disputed the claim of Blue Shield attorneys that the kind of activity would be illegal for the Plan because it would restrict the right of doctors to practice. "It is my firm conviction," he wrote, "that within the framework of the legal advice received by Blue Shield, and within the framework of the law under which Blue Shield operates, there is ample latitude for Blue Shield to do much more than it has in cooperating with Blue Cross plans, medical societies, hospitals and the public in lessening unnecessary utilization of Blue Shield services. With the exception of diagnostic and emergency services provided in doctors' offices, practically all Blue Shield services are rendered in hospitals. If unnecessary hospital utilization is reduced, it should follow that a substantial amount of unnecessary utilization of Blue Shield services would also be reduced. It is therefore of the greatest interest to the public and to the Pennsylvania Blue Shield plan that unnecessary use of hospital facilities be eliminated wherever it exists. I strongly believe that greater accomplishments in this effort can be made if Blue Shield places its moral and active support behind the medical review committees established through the cooperation of Blue Cross plans and the medical societies. Furnishing of statistical data in the form of pure statistics to such review committees without resort to names of patients or doctors may be helpful to them in their review work. The formulation of such objective data would in no way consider a restriction on doctors as to 'methods of diagnosis or treatment.'"

Commissioner Smith then put bite into his accusations by backing them up with six specific orders—including one that directed Blue Shield in Pennsylvania to submit quarterly reports to him summarizing its progress in fulfilling these orders.

In his adjudication, the commissioner also rejected a Blue Shield request for a higher fee schedule on the grounds that Blue Shield had not demonstrated "by concrete evidence that such changes are proper and reasonable."

Referring to testimony submitted at the hearing preceding the adjudication, Mr. Smith pointed out that the "chairman of the fee schedule committee stated with respect to the changes proposed for radiation therapy that he did not know how the proposed new fees were arrived at by the roentgenologists and that he would take no responsibility for these fees being appropriate and fair."

This statement led the commissioner to a rhetorical question: "If the chairman of Blue Shield's fee schedule committee cannot personally vouch for the fairness of a fee submitted to me, how can I vouch for it before the general public of Pennsylvania?"

Another point that apparently annoyed the commissioner was the contention of Blue Shield that fee schedule revisions "must be accepted by me where there is no medical testimony contradicting their reasonableness."

"If this is true," he wrote, "I could never reject any proposed fee until I, as insurance commissioner, had elicited and obtained medical testimony challenging its reasonableness. Furthermore, I would doubt the readiness of many doctors to testify against the reasonableness of fees worked out by Blue Shield and committees of the state medical society. This fact was very evident when the state medical society rejected an opportunity to have a representative appear at these hearings for the very purpose of testifying upon the reasonableness of proposed fees. If, as Blue Shield contends, a proposed fee must be accepted when not contradicted by medical testimony, it would not be the insurance commissioner who would be empowered

to approve or reject proposed fees, but rather, it would be the medical profession. This interpretation I must summarily reject as being contrary to the clear intent of the Blue Shield Regulatory Act."

Although the commissioner requested Blue Shield to extend full service benefits to more people "without regard to their age," he disapproved the senior citizen program submitted by Blue Shield. The trouble with the agreement, he observed in another, shorter adjudication, was that it was "the same as the standard non-group plan with an increase in premium."

Taking another jab at the close relationship between doctors and Blue Shield, Commissioner Smith noted that "the stimulus toward a Blue Shield senior citizen program was generated by the Medical Society of the State of Pennsylvania," and "it was apparent that no consideration has been given to the special needs of older patients with respect to income, benefits or rates."



*D. Swords*

"You're Dr. Evans, aren't you? I never forget a face."

## "I DO NOT LOVE THEE, DOCTOR FELL"

(Abstracted with permission of The New England Journal of Medicine; issue of Sept. 8, 1960)

So much has been written and broadcast about the "public relations" (good or bad) of the medical profession by those opposed to the principles espoused and represented by organized medicine and also by those who strive to improve medicine's public relations that the practicing physician is bedazzled into forgetting one simple and essential truth: he is the object of this opinion-making or opinion-breaking furore, and the success or failure of his antagonists, despite the efforts in his behalf by those concerned with the public relations of medicine, depends upon him.

No public-relations specialist can accomplish for the medical profession what is inescapably the responsibility of the physician. The public-relations professional can only advise. Films, lectures, exhibits, radio and television programs, magazine articles, press releases and leaflets are "gimmicks", the value of which is lost (as are the funds used to produce them) by the activities and attitudes of the individual physicians they were designed to extol.

Literature is filled with sharp barbs aimed at physicians. Some are painfully delightful, like the anonymous quatrain:

Three faces wears the doctor; when first sought  
An Angel's; and a god's the cure half-wrought;  
But when, the cure complete, he seeks his fee,  
The Devil looks less terrible than he.

In this regard, however, physicians stand not alone. The lawyer, teacher and clergyman have been prodded by many a pen.

As Tom Brown wrote more than two hundred and fifty years ago about the Dean of Christchurch:

I do not love thee, Doctor Fell,  
The reason why I cannot tell;  
But this alone I know full well,  
I do not love thee, Doctor Fell.

It is a type of criticism that will always be present. May physicians never lose their sense of humor or be overwhelmed by the eminence of their position!

What increase in criticism of medicine that has developed in the past decade is for the most part directed toward organized medicine.

Organized medicine therefore must continue to conduct public-relations programs designed to inform the general public of its stand on vital issues affecting medical practice, economics, and this country's future. It is naive to think that because organized medicine is made up of honorable, dedicated and educated men, its viewpoints, no matter how well presented, will be universally understood and accepted. Such is not the case, and chances are that it will never be; for the opposition, too, as strongly dedicated to its cause as is organized medicine, conducts vigorous public-relations programs. This struggle for men's minds by con-

flicting ideologies will not necessarily be won by those whose hearts and intentions are most pure.

The trend toward total socialization of medicine may be stopped if the individual physician, instead of merely being appalled by what is said and written about his profession and critical of his organization's public-relations program for allowing such things to be said and written, would look into himself, re-evaluate his own economic, civil, moral and ethical values, and become his own public-relations agent. What reputation the medical profession enjoys, or does not enjoy, rests with him. He is the medical profession. This basic truth has been repeatedly emphasized by those who direct the public relations of the profession. It is a prescription so self-evident and simple that it is ignored.

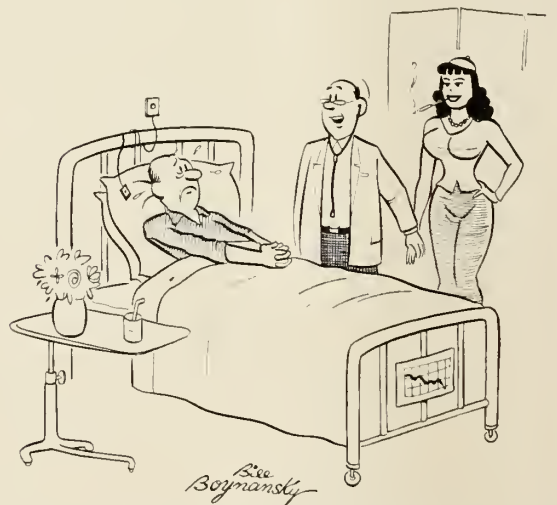
The physician who complains that public-relations programs "aren't doing the job" for him and organized medicine should submit himself to an objective self-examination.

How actively and loyally does he support and participate in the organizations representing him on a national, state and local level? Can his organization's public relations be improved without his personal participation? Does he help organized medicine merely by standing on the side lines offering nothing but criticism?

What are his relations with his fellow physicians? Public-relations programs cannot wash interprofessional linen.

What are his professional and personal relations with his patients, from whom all opinions originate and flow? Impersonal care and consideration, unjustified high fees and bad manners breed discontent and contempt.

Public relations, like charity, begin at home.



"Mr. Casperich, I'm going to try one more remedy—if this fails, I'm afraid your case is hopeless!"



## THE MONTH IN WASHINGTON

Washington, D. C.—The American Medical Association branded as untrue certain statements by Abraham Ribicoff, Secretary of Health, Education and Welfare, concerning the Administration's legislative proposal to provide medical care for the aged under Social Security.

Dr. F. J. L. Blasingame, A. M. A. executive vice-president, presented a point-by-point rebuttal in a letter to the more than 500 editors from throughout the country after Ribicoff addressed the annual meeting of the American Society of Newspaper Editors in Washington.

Dr. Edward R. Annis, Miami surgeon representing the A. M. A., accused Ribicoff of misrepresenting the role of doctors under the administration proposal. Dr. Annis answered Ribicoff on a radio-television program with Sen. Kenneth B. Keating (R., N. Y.) which was taped in Washington. Ribicoff had made the misrepresentation on an earlier Keating program.

Dr. Blasingame said Ribicoff's statement before the editors that physicians are not included in the administration proposal, the King bill, "simply is not true." The A. M. A. official pointed out that the bill includes interns and residents in teaching hospitals as well as pathologists, radiologists, physiatrists and anesthesiologists working in hospitals or serving hospitals' outpatient clinics.

"Mr. Ribicoff further claims that the King bill provides free choice of hospital physician," Dr. Blasingame said. "The fact is only hospitals signing contracts with the federal government would be available to patients. If the only hospital in a community was not approved by the Secretary of HEW, patients in that community would be forced to seek hospitalization in some other city. That would not afford free choice of hospital. If the patient's physician was not on the staff of the other hospital, the patient would be denied free choice of physician."

Dr. Blasingame also disputed Ribicoff's contention that the King bill is not socialized medicine.

"By common definition, any scheme which calls for a system of compulsory health care which is administered, financed, and controlled by the federal government is socialized medicine for that segment of the population it serves."

Rep. Walter H. Judd (R., Minn.) who is a physician, was quoted as one of a number of House and Senate members who agree with the A. M. A.: "The public has been led to believe that they can get government financing without government control and ultimate government operation of medical services. It is naive for anyone to believe that Congress will take the people's money away from them through taxes and then allow the money to be spent by someone else without the Congress maintaining its own firm control."

Pointing out that the nation's physicians always have been in favor of medical care for all regardless

of ability to pay, Dr. Blasingame said:

"It seems strange to us that Mr. Ribicoff continues to lobby for the King bill while completely ignoring the Kerr-Mills law, passed by Congress last year with strong support by the nation's physicians.

"The Kerr-Mills Law enables the states to guarantee to every aged American who needs help the health care he requires. And the states are implementing the law with unprecedented swiftness."

Dr. Annis pointed out on the radio-television program that "doctors would work for the government by working for the hospitals under contract to the government." He said those doctors would work "under rules, regulations and controls prescribed and laid down" by the HEW.

### PHYSICIANS' RETIREMENT

A new bill to encourage physicians and other self-employed persons to set up their own retirement plans started through Congress with approval of the House Ways and Means Committee.

Bearing the same number, H. R. 10, as a similar bill which died in Congress last year, the new measure would permit a self-employed person to defer taxes on income placed in a private retirement program. The special treatment would be limited to \$2,500 or 10 per cent of income each year, whichever is smaller.

Such income could be invested in qualified pension trusts, annuity programs, profit-sharing plans or a new type of non-transferable government bond redeemable when the individual reaches retirement age or suffers disability.

An individual could start drawing benefits at age 59½, or earlier in the case of disability. A self-employed person would have to start drawing benefits by age 70½.

If a self-employed individual had more than three employees, he would be required to set up pension plans for them before he could benefit himself.

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The number of persons in South Carolina with health insurance reached a new high of 1,391,000 at the end of 1959, the Health Insurance Institute has reported. This was an increase of 5.6 per cent over the 1958 year-end total.

The survey of reports from insurance companies, Blue Cross-Blue Shield and other health care plans, disclosed that the number of persons in the state with hospital expense insurance increased by 74,000 during the year to reach a total of 1,391,000 at the end of 1959.

The number of persons with surgical expense insurance climbed from 1,070,000 at the end of 1958 to 1,164,000 at the end of last year. Persons protected by regular medical expense insurance, which helps pay for doctor visits for non-surgical care, increased from 377,000 to 464,000.

# Announcements

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## DUKE UNIVERSITY MEDICAL CENTER

Duke University Medical Center for the third consecutive year offers a Post Graduate Medical Course to be held at Morehead City July 17-22. The program has been designed primarily for the generalist; however, ample information will be presented to make it instructive for the specialist. The day's program begins at 8:30 a. m. and ends at 1:30 p. m. in order that the afternoons will be free for recreational activities.

1. All meetings will be held at the Morehead-Biltmore Hotel, Morehead City, North Carolina.

2. Accommodations for some of the attending physicians and their families will be available at the Morehead-Biltmore Hotel (single \$6.00-\$8.00, double \$8.00-\$10.00, twin \$11.00-\$14.00, without meals). For those who prefer accommodations elsewhere and for those who apply late, space can be obtained in the Morehead City-Beaufort-Atlantic Beach area. Requests for all accommodations should be made directly to the MANAGER, Morehead-Biltmore Hotel.

3. Registration for the course should be made as soon as possible. Registration fee of \$40.00 is payable

in advance. Limited to 100 participants.

4. The Faculty cordially invites each participant and his wife to a Social Hour at 5:30 p. m., Monday, July 17 at the Morehead-Biltmore Hotel.

5. This program is approved for 30 hours, Category I, Post Graduate Education, required by the A.A.G.P.

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## OBSTETRIC - PEDIATRIC SEMINAR

The 11th Annual Postgraduate Obstetric-Pediatric Seminar which is sponsored by the Maternal and Child Health Divisions of the State Health Departments and the Maternal Health Committees of the State Medical Associations of Georgia, Florida, Alabama, Mississippi and South Carolina is scheduled to be held August 17-18-19, 1961. Headquarters will be at Colonial Inn, St. Petersburg Beach and reservations should be made as early as possible. The Seminar is approved by the American Academy of General Practice, 15 hours Category I.

Hilla Sheriff, M. D., Director  
Division of Maternal and Child Health

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## RECENT ADVANCES IN CORONARY DISEASE

### A Symposium

Under the Auspices of the Association of General Practitioners of Central South Carolina and the Division of Postgraduate Education of the Medical College of South Carolina

COLUMBIA HOTEL, COLUMBIA, SOUTH CAROLINA  
JUNE 27, 1961, 6:30 P. M. (SHARP) TO 10:30 P. M.

Refreshments and Dinner 8:00 to 9:00 P. M. (\$3.00)  
Discussion 9:00 to 10:30 P. M.

FACULTY: From the Medical College of South Carolina:

Dr. H. R. Pratt-Thomas, Professor of Pathology

Dr. J. M. Stallworth, Assistant Professor of Surgery

Dr. Edwin Boyle, Associate in Medicine

Dr. Dale Groom, Assistant Professor of Medicine; Moderator

### GUEST SPEAKER:

Dr. A. Calhoun Witham, Associate Professor of Medicine, Medical College of Georgia

Approved for 3-½ hours credit, Category 1, by the Academy of General Practice. This presentation is supported by a grant from Merck, Sharp and Dohme Company for postgraduate medical education.

Write to: Dr. L. V. Jowers  
1634 Taylor Street  
Columbia, S. C.

# News

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## STATE BOARD OF MEDICAL EXAMINERS OF SOUTH CAROLINA COLUMBIA, SOUTH CAROLINA

The State Board of Medical Examiners of South Carolina held a meeting on April 26th at the Francis Marion Hotel, Charleston, South Carolina, to interview applicants for a medical license by endorsement of credentials. Eight physicians were licensed to practice in South Carolina. They are as follows:

Dr. James A. Amlicke is a 1959 graduate of Cornell University Medical College. He is licensed in Michigan and also has a National Board certificate. Dr. Amlicke is currently a Flight Surgeon with the U. S. Air Force. He is stationed at the Charleston AFB where he will be for the next two and a half years.

Dr. William S. Cheek, a graduate of the University of Louisville School of Medicine ('50), is presently an assistant professor of Pathology at the University of Tennessee. He is licensed in Mississippi. Dr. Cheek will be a Pathologist at the Spartanburg General Hospital after June 1st.

Dr. Grady S. Clinkscales, Jr. graduated from the Emory University School of Medicine in 1956. He is licensed in North Carolina and Minnesota. Dr. Clinkscales is from Anderson. He is presently in residency training (Orthop.) at the Mayo Foundation in Rochester, Minnesota.

Dr. Elmer E. Hague, Jr. is a 1957 graduate of the Medical College of Georgia and he is licensed in Georgia. Dr. Hague has been at Spartanburg General Hospital for the past three years as a resident in Surgery. After July 1st he will have an office on Catawba Street in Spartanburg.

Dr. Joseph K. Newsom, a graduate of Tulane University School of Medicine ('60), is licensed in Louisiana. He is currently serving his internship at McLeod Infirmary. Dr. Newsom will begin General Practice after July 1st in Cheraw.

Dr. Paul K. Perkins graduated from the University of Chicago—Rush Medical College in 1932. He was in the Regular Medical Corps of the Navy for thirty years. He is trained in Surgery and his last assignment was at the U. S. N. Hospital at Beaufort. Dr. Perkins has been in Industrial Medicine with the Springs Cotton Mills in Chester since the first of the year.

Dr. Howard P. Snyder is a 1938 graduate of McGill University School of Medicine. He is licensed in New Jersey, New York, and Canada. Dr. Snyder served a residency in Ophthalmology at St. Luke's (N. Y. C.) '40 to '47. He is in practice in Westfield, N. J. presently and is undecided when and where he will locate in this state.

Dr. George C. Strozier graduated from Emory University School of Medicine in 1946 and has a Georgia license. He had residency training in Psychiatry at Bowman-Gray and Warren State Hospital (Pa.). Formerly at Milledgeville in Georgia, he is presently in practice at the South Carolina State Hospital.

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Two physicians, Dr. Charles Hinnant and Dr. Walter Gilliard will move to Anderson and begin practice July 1 in the new medical office building being constructed on the 1400 block of North Fant Street. Dr. Hinnant, a native of Bamberg, now lives in Spartanburg. Dr. Gilliard is a native of the Piercetown community of Anderson County.

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Callis J. Anderson, M. D. announces the removal of his offices to 733 North Church Street, Spartanburg, S. C.

Dr. Anderson's practice is limited to Ophthalmology.

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John C. Bonner, M. D. announces the removal of his office from 96 Rutledge Avenue to 4 Avondale Avenue (Avondale Shopping Center) Charleston, for the practice of Pediatrics.

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## 50 DOCTORS CERTIFIED SPECIALISTS

### Advanced Training Course Completed

More than 50 South Carolina doctors have completed advanced training courses and have been awarded certificates as specialists.

Certification by one of the 18 American examining boards is granted only after a series of rigid qualifications are met.

South Carolina physicians earning certificates include:

Vincent Hyams, Jr., Aiken; Charles H. Browne, Anderson; Jennings K. Owen, Jr., and William D. Wilfong, both of Bennettsville; James H. Boyers and Ronald W. Glover, both of Beaufort; Kenneth J. Boniface, Laurie L. Brown, John F. Buse, Jr., Charles M. Callis, Walton L. Ector, Barney L. Freeman, Jr., J. Ivester, Elias F. Lawandales, Carter P. Maguire, Jack W. Rhodes, James P. Semmens, Lawrence A. Shapiro, Eugene Y. Smith, Jr., Richard B. Speaker, all of Charleston.

Also, Ezra K. Aycock, L. W. Blackmon, Bartlette Cheatham, Roger W. Cole, Daniel W. Davis, Jr., Shephard N. Dunn, Philip W. Fairey, Jr., Robert W. Gibbs, Gustaf M. Gudmundson, Ambrose Hampton Gonzales, Jr., Charles A. James, Harry Boatwright, all of Columbia.



Also, William J. Goudelock, Emsley; Earl R. Jones, Florence; James E. Sams, Fort Jackson; James W. Forrester, Robert O. Jones and Robert L. Lumpkin, all of Georgetown; James H. Arnold, John D. Ashmore, Jr., Clarence M. Easley, George M. Grimbail, Sam M. King, William M. Madden, John S. McCutcheon, Jack M. Vander Wood, Frank R. Wreen, John E. Zcliff, all of Greenville.

Also, James C. Parke, Jr., Hartsville; William F. Dukes, Henry F. Frierson, Hugh E. Smith, all of Orangeburg; William B. Ward, Jr., Rock Hill; Joseph J. Claro, Shaw Air Force Base; Kohn E. Keith, Samuel P. Fleming, Edward C. Frank, all of Spartanburg; William C. Percy, Walterboro, and William S. Lyles, Winnsboro.

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#### DR. BANOV HONORED BY HEALTH GROUP

Dr. M. U. Dantzler of Charleston was elected president of the South Carolina Association of Public Health Physicians at a medical section meeting held in conjunction with the 38th annual meeting of the SCPIHA.

Other officers elected included Dr. Hilla Sheriff of Columbia, vice president, and Dr. L. A. Nimmons of Bishopville, secretary and treasurer.

A plaque was presented to Dr. Leon Banov of Charleston, who will retire next month after nearly 50 years of public health service.

C. C. Moore of Columbia was elected president of the sanitarians, another section group of the SCPIHA.

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Dr. H. M. Eargle of Orangeburg attended a meeting of more than 4,000 family doctors in the Miami Beach, Fla., Convention Hall in the Spring.

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Dr. A. Richard Johnston of St. George, S. C., was elected first vice president of the Association of Surgeons of the Southern Railway System at its annual meeting.

More than 100 physicians from 15 southern states attended the three-day scientific meeting which was held in Charlottesville, Va.

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Dr. Samuel Thompson Haddock is completing his residency at Christie Clinic, Vanderbilt University, and will begin practice in Anderson July 1 with his father, Dr. S. H. Haddock.

Dr. James Barham, Jr., a native of Marion, will practice in Anderson beginning July 1. He specializes in pediatrics.

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Dr. Robert Holman, who practices medicine in Ellorree in association with Dr. Robert Burnett recently spoke on "Tuberculosis from the Patient's Viewpoint" at the annual meeting of the Orangeburg County Tuberculosis Association of which J. U. Dantzler is president.

#### SCHOLARSHIP ESTABLISHED

##### by Oconee Doctors

A memorial college scholarship for pre-medical students has been established by the Oconee County Medical Society. The society will contribute \$300 per year to a trust fund for the scholarship.

The recipient would receive \$150 semester over a four-year period of attendance at an accredited pre-medical college. The scholar must maintain a B average.

The society's scholarship committee may select an alternate recipient in the event of illness or academic default.

Applicants will be considered on the basis of character, scholarship, leadership and financial need.

The grant was established in honor of deceased members of the medical group. Committee members are E. L. Shuler of Westminster, Julius Earle of Walhalla and Hugh H. Wells of Seneca, all medical doctors.

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#### LANDRUM PHYSICIAN NEARS HALF CENTURY OF PRACTICE

Dr. Russell Walden approaches the half-century mark in his service to residents of the upper portion of Spartanburg County.

In 1912, Dr. Walden went to Campobello to begin the practice of medicine. He had been graduated from Wofford College and then entered the Medical College of South Carolina to prepare further for his work as a physician.

After completing his studies at the Charleston school, the Spartanburg County native returned to his home area to practice. A Fair Forest native, he decided to practice at Campobello. The following year, he moved to the nearby town of Landrum. And he is still there.

Though he is nearing his 77th birth anniversary, he is quite active and ready to go on with the practice of medicine as long as he is needed. His hands are regarded as steady and sure as ever and his eyes bright and keen as he approaches his 50th year in the profession.

And in nearly 50 years of practice, Dr. Walden has yet to send out a bill for services to patients over a wide area in Spartanburg County and outside.

Many changes have been seen by the Medical College graduate in his 49 years service. When he began his practice, he "carried his drug store in his saddlebags," as one long-time resident notes.

And with the nearest hospital some distance away, minor and emergency operations were to be performed, and at almost any hour of the day and night. With the establishment of a hospital at Tryon, N. C., just five miles away, and with slowly improving means of transportation, the number of these operations that had to be done by the local physician decreased.

# Deaths

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## DR. HENRY P. WAGENER

Dr. Henry Patrick Wagener, who was born in Charleston in 1890, died in April at his home in Rochester, Minnesota. Dr. Wagener was professor of ophthalmology for the Mayo Foundation and had been ophthalmologist at the Mayo Clinic for 41 years.

Dr. Wagener received his B. S. from the College of Charleston in 1909 and was graduated from the Medical College of South Carolina in 1913. He served in the U. S. Army in World War I. In 1923 he received an M. S. in ophthalmology at the University of Minnesota, in 1926 becoming a consultant in this field at the Mayo Clinic and in 1947 Professor of Ophthalmology at the Mayo Foundation, University of Minnesota. Dr. Wagener was a lecturer, author of professional articles, a member of the AMA, American Academy of Ophthalmology and Otolaryngology, the American Ophthalmology Society and an honorary fellow of the South Carolina Medical Association and the Charleston County Medical Association.

## DR. B. H. TODD

Dr. B. Harris Todd, 37, of Bowling Green, Ky., died unexpectedly at his home on April 17, 1961.

He was formerly of Columbia where he was born and reared. He graduated from Dreher High School, the University of South Carolina and was a cum laude graduate of the South Carolina Medical School in Charleston.

## DR. H. D. TRIPP

Dr. Harry Defeau Tripp, 56, a surgeon on the medical staff of the South Carolina State Hospital, died suddenly in April.

He was born in Bremen, Ind., June 3, 1904, and

had been with the State Hospital for the past two years.

Dr. Tripp did pre-medical work at Notre Dame and was graduated from Northwestern University in medicine. He did graduate work in surgery at the University of Pennsylvania, where he also received his M. A. degree.

He was a member of the South Carolina Medical Association, the Richland County Medical Society, the International College of Surgeons and was a Mason.

## DR. C. E. CROSBY

Dr. Curtis Estes Crosby, 75, of the Abbeville Highway, died on April 16 after several months illness.

Born in Fairfield County, Dr. Crosby was a graduate of South Carolina Ceducational Institute in Edgefield, attended Atlanta Medical College for two years, then transferred to the Medical College of South Carolina and graduated in 1910. He was engaged in general practice in Blackstock and Great Falls from 1910 to 1917.

Dr. Crosby was graduated from the Episcopal Ear, Eye, Nose, Hospital in Washington, D. C. in 1918. He was associated with Dr. J. W. Jervy, Sr., in Greenville until he came to Greenwood in 1919 and practiced here until his retirement in 1956. He held a number of clinics in the lower part of South Carolina.

Dr. Crosby was a member of the board of directors of the Greenwood Building and Loan Association, former president of Greenwood County Medical Society, past vice president of Seaboard Airline Railway Surgeons Association. He was a charter member of the Greenwood Kiwanis club and the Greenwood Country Club.

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**INFECTIOUS HEPATITIS.**—Good evidence is now available that infectious hepatitis can be prevented by the intramuscular injection of normal human serum globulin if administered prior to the onset of symptoms and signs of the active disease.  $\gamma$ -Globulin should be given routinely to all with known heavy exposures and to those exposed in the course of an epidemic. It is especially indicated for siblings of children with this disease and for others who are chronically ill and have been exposed. For prevention, 0.02-0.04 ml. per kilogram of body weight should be given intramuscularly and repeated in 6 weeks if exposure continues. Stokes has recently reported prolonged protection following the administration of  $\gamma$ -globulin to persons exposed in institutional outbreaks. It has been postulated that active immunity may result from an infection rendered inapparent through protection by immune globulin.—Menzin, A. W.: Treatment in Internal Medicine: Current Immunization Methods and Materials, *Arch. Intern. Med.*, 107: 409-429 (March) 1961.

# Book Reviews

*THE STRUCTURE AND DYNAMICS OF THE HUMAN MIND* by Edoardo Weiss, M. D. Grune & Stratton, Inc., New York, 1960. 458 pages. Price \$8.75.

This book is more or less a treatise on the general subject of the Ego as seen from the strict classical Freudian point of view, although it attempts to emphasize the rising importance of the "Ego" or "Self". The author substantiates this in his preface by stating that it really represents a culmination of his close association with Dr. Paul Federin. Dr. Federin, who died in 1950, was one of the early followers of Freud, who in later years of the association turned more and more away from Freud's failure to consider the importance of the central position of the Ego or Self in all psychological work. The influence of instinct, and the forces of the external world, commonly referred to as the Super Ego or conscience, which were the main forces in Freudian thinking; out of which struggle or compromise the Ego arose almost as if it were the product itself of some union between the instincts and the external social forces.

In this book Dr. Edoardo Weiss attempts to give greater consideration to the basic position of the Ego, even though it is not in consonance with the basic Freudian concepts. This is brought out in various chapters, such as one on the dynamic aspect of the Ego, Formulation of the Ego, and Its Functions and Divergents, Ego Concept of Psychoanalysis. As it stated, "Freud was initially deflected from the study of the Ego." He considered psychoanalysis as the science of the unconscious, and for a certain time Ego psychology did not enter his field of interest. He distinguished them from the sexual instincts, but he did not go deeper into their analysis.

The first attempt to develop this early deficiency on Freud's part was by Alfred Adler. His work on "The Will to Power" as an attempt to develop the concept of Ego-psychology, fell into disrepute shortly thereafter because of Adler's complete disregard for the unconscious.

Finally, this entire book is most interesting in view of its attempt to emphasize the more basic position of "Ego feeling or Self-feeling." Above and apart from what most people think of Ego feeling, mainly self-assertion, self-striving, self-preservation, and self-defense. The emphasis upon more far reaching Ego-feeling, which is the hallmark of other schools of Ego-psychology, shows clearly the tendency for all schools of psychoanalytic thought to come closer in theory techniques of their nature and behavior. After all, the most penetrating studies of man have been done in the past 50 odd years, although man, for some thousands of years, in one way or another, has been attempting to understand and describe the nature of

man, thus, it is not remiss to think that the 1960's and 1970's will see an ever-increasing tempo in the expansion in both theory and practice in the nature and problems of human behavior.

This book is somewhat technical, but does have an overall historical approach, which is somewhat interesting to read.

Norton Williams, M. D.

*DOCTOR STRAND*, by Boris Sokoloff. Vantage Press, Inc. New York. 1960. Pp. 205. Price \$3.50.

An absorbing story lifted out of the ordinary class of medical novels by its skillful presentation of ideas and its manner of narration. Men of science, engaged in cancer research, and the beautiful socialite wife of one, who is a mis-fit in their world, come alive as the story unfolds. Vividly told, the lives of these people, their professional goals, their greed, their weaknesses and their love affairs combine to create a rewarding literary experience.

L. S.

*THE HAND — A Manual and Atlas for the General Surgeon*, Henry C. Marble, M. D., F.A.C.S., W. B. Saunders Co., Philadelphia, 1960. \$7.00.

This book describes methods of treatment of hand injuries as done by Dr. Marble at the hand clinic of the Massachusetts General Hospital. It is obvious that the author's first love is anatomy and physiology as applied to the forearm and hand. A tab should be prominently placed at the approximate mid-point of this book labeled "proceed with caution". The proximal half of the book is an excellent atlas of the anatomy and physiology of the forearm and hand, with many cross-section views taken at various levels from the elbow to the fingers. The illustrations are well labeled but the author's method of identifying nerves, arteries and tendons is laborious.

The distal half of the book was written by a surgeon with his own ideas concerning hand injuries and infections but many of the procedures are debatable at best, such as applying split thickness skin grafts to defects of the tactile surface of the fingers. The author recommends trimming off the bone in a fingertip amputation thus making it possible to obtain primary closure. No mention is made of the cross-finger flap operation for restoring the lost tissue.

I recommend highly this book to the student and house officer for study of the anatomy of the hand and arm but surgical procedures would best be studied elsewhere.

Carter P. Maguire, M. D.



*PROGRESS IN PSYCHOTHERAPY — volume V.*  
Edited by Jules H. Masserman, M. D. Grune & Stratton, Inc., New York, 1960. 254 pages. Price \$8.50.

This is the 5th annual volume published by the Academy of Psychoanalysis, which represents those schools or institutions of psychoanalytic thought now properly known as neo-Freudians. This fifth volume represents the wide range of interests from individual contributors and encompasses the overall progress and movement of intensive psychological therapy all through the world. This volume has a theme which is comparable to a well-formed play in four acts.

The first part of the book deals with a review history of the last four years in psychotherapy. The next part of the book deals with fundamentals of psychotherapy and its relationship to associated drug therapy, group therapy, and public health.

The next part deals with the definite contemporary methods of intensive psychotherapy and how it is related to the overall psychoanalytic technique. A particularly good article in this section deals with the overall technical difference between psychotherapy and psychoanalysis in a way that brings the two techniques closer together rather than farther apart. The following section deals with special problems such as "psychotherapy with executives in industry" and other problems such as marital problems, alcoholism, criminology, gangs, delinquents and schizophrenia. The last part of the book deals with progress of psychotherapy behind the Iron Curtain and in Japan by members of the Academy who have traveled in these areas.

This is the most dramatic book of its kind written and celebrates its 5th year of existence.

This book is recommended to all practitioners of medicine, because it is a thorough and complete review of general and intensive psychotherapy.

Norton Williams, M. D.

*INFECTIOUS DISEASES OF CHILDREN*, by Saul Krugman and Robert Ward, 2nd Edition. C. V. Mosby Company, St. Louis 1960. Price \$13.00.

The second edition of this book brings the reader up to date on a field which has known some very rapid and illuminating progress in the past few years. This is particularly true of the many advances made in the field of virology. The chapter on enteroviral infections is an example of the very valuable information contained, which the reader can otherwise have gleaned only from a very thorough reading of many medical journals in the past several years.

The book is written primarily for the clinician and detailed laboratory and statistical data are omitted. It is well organized and quite readable. While illustrations are not abundant, simple charts and graphs aid in the easy understanding of the material.

M. J. Jenkins, M. D.

*SURGERY OF THE ESOPHAGUS* by Raymond W. Postlethwait, M. D. and Will C. Sealy, M. D. Charles C. Thomas, Springfield, Ill. 1961. pp. 482. Price \$30.00.

This large volume is the most complete description obtainable of surgical lesions of the esophagus and of related ancillary disorders. The general surgeon will profit especially from the sections on varices with portal hypertension, reflux esophagitis and hiatal hernia. Illustrations of diagnostic studies and operative procedures are profuse, clear and to the point. References to the literature number about 3500. From these, as well as from the experience at Duke, there are numerous tabulations of incidence, method of treatment and results as well as diagnostic signs.

The authors properly indicate their own evaluation of management from published papers and from the results of the Duke Medical Center. The structure of the chapters is well arranged so that only a brief index is required. The type is easy to read. This book will be of great value as a reference work to all surgeons dealing with disorders affecting the esophagus.

Fred Kredel, M. D.

*OFFICE DIAGNOSIS*, Paul Williams, M. D., W. B. Saunders Co. 1960. Price \$12.50.

This book was conceived by the author "as a new approach to the problems of practical office diagnosis". The innovation in this instance would seem to be recognition of the fact that "diagnosis partakes of philosophy and art fully as much as it does of science", and inclusion of generous quantities of each of these categories (particularly the former) in a text for the first time. Symptoms arising from various systems are approached in descending fashion, beginning with certain nonspecific symptoms and moving on to include symptoms referable to the skin, the head and neck, the chest and its contents, the abdomen, etc.

The author presents a practical approach to many office problems based upon his extensive experience. The text is well written and the type and spacing are such as to make reading easy. The tone of the presentation seems too simplified, however, and would seem to be directed to the student more than to the practitioner. The discussion, on the other hand, is often incomplete particularly regarding differential diagnosis, and thus could not be recommended for the student. The oversimplification extends to the illustrations which frequently seem superfluous. Tying together the practical tips is an abundance of philosophy in which no shortage of words exists.

The text could have been improved while maintaining its practicality by choosing fewer subjects and covering these in more detail. I would liken this book to an ounce of bourbon in a gallon of water; the poverty of effect is hardly worth the pain of ingestion.

Louis P. Jervay, Jr., M. D.

*HAEMOPOIESIS, CELL PRODUCTION AND ITS REGULATION*. Ciba Foundation Symposium. 490 Pages. Little, Brown and Company, 1960. Price, \$11.00.

In recent years, a great deal of information has been accumulated on the kinetics of the various aspects of cell proliferation. The present volume is a compilation of work done in many research centers, describing the newer techniques and results thereof. The symposium was conducted by the Ciba Foundation, who have published the papers presented.

The use of tritiated thymidine followed by radioautography has been a tremendous advance in determining the various pathways of hemopoiesis as well as the rate, and its uses and limitations are well covered. Humoral factors, primarily erythropoietics, are discussed, including their action, sites of production, and methods of assay. Possible explanations as to the specific defects in leukemic and polycythemic states are presented, and further avenues of research suggested.

This volume is of extreme interest to anyone concerned with newer aspects of cell regulation, and can be highly recommended for an excellent review of the techniques now being utilized. Its scope is far apart from present clinical concepts, but lays the foundation now for a much better understanding of hematological problems in the future.

Charlton deSaussure, M. D.

*CLINICAL CARDIOPULMONARY PHYSIOLOGY*, Edited by Burgess L. Gordon, M. D., et. al. Published by Grune and Stratton, New York, 1960. \$28.50.

This is an enlarged second edition of a book originally introduced in 1957 under the auspices of The American College of Chest Physicians with the main objective of setting forth in one volume the fundamentals of cardiovascular and of pulmonary physiology. Running a thousand pages and abundantly illustrated, it is the work of almost a hundred contributing authors who for the most part succeed well in their objective of summarizing their various facets in clear and simple language (though a few give perhaps a disproportionate weight to their own investigations). About twice as much space is devoted to pulmonary as to cardiovascular subjects, and physiologic concepts are emphasized throughout in keeping with what might be called a general trend of clinical medicine in the direction of physiology.

In part, the treatment of this broad field is quite superficial—and necessarily so. But many clinicians might question the value of, for example, reducing the entire field of electrocardiography to only sixteen pages or the "Clinical Examination Including History and Physical Findings in Cardiovascular Disease" to ten, while at the same time devoting far more space to "Distribution of Gas and Blood in the Lungs" or allocating some twenty-four pages to "Bullous Emphysema and Pulmonary Cysts". On the other hand, chapters on "Altitude Physiology", "Diving

and Submarine Operations" and "Blast Biology" make interesting reading for most of us and are of more than academic interest in the era in which we live. Even space comes in for mention.

This book, well documented with extensive bibliographies, should not be overlooked by medical students and physicians as an excellent encyclopedic reference source on pulmonary physiology.

Dale Groom, M. D.

*MEDICAL ALMANAC 1961-62* compiled by Peter S. Nagan, W. B. Saunders Company, Philadelphia, 1961. \$5.00.

This should be an extremely valuable book for anyone who deals with anything beyond the strictly clinical side of medicine. It contains a compilation of figures and facts on a wide variety of subjects, such as death rates, prevalence of certain diseases, costs of medical care, income tax rates, visits per person per year, physicians population ratio, etc., etc., including practically all the matters for which anyone who writes or talks must search in a large number of sources.

It should be on the shelves of every library, medical society, hospital administrator and medical writer of any sort. What the World Almanac does for general information is done in this book for specific medical reference.

JIW

*RYPINS' MEDICAL LICENSURE EXAMINATIONS*. Edited by Walter L. Bierring, M. D. 9th Edition. J. P. Lippincott Co., Philadelphia. 1960. Pp. 787. Price \$11.00.

For a concise and orderly presentation of the broad field of medical knowledge this book remains unique. The editor has received the invaluable assistance of a distinguished panel of authorities. Dr. R. P. Walton of the Medical College of S. C. has ably prepared the section on pharmacology as he has done in previous editions.

There has been a general updating of material in line with the latest accepted medical advances and a complete revision of several sections. As in past editions only fundamentals are included.

To this writer chapter one on Medical Qualifying Examinations is of special interest. Dr. Bierring has given a clear and scholarly presentation on the goals and philosophy of licensure examinations. At the age of 92 with 50 years active participation and leadership in licensure (and in what field of medicine can not the same be said of him?), his wisdom and experience shine through. Examiners and examinees can profit from what he has written.

For those preparing for licensing examinations, this book is a must. As a general review reference work, edited by one of the leading medical figures of this generation, it is a valuable addition to any physician's library.

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*HANDBOOK OF MEDICAL TREATMENT*. 7th Edition. Edited by Chatton, Morgan and Brainerd. Lange Medical Publications, Los Altos, California 1960 \$3.50.

Within the author's purpose succinctly stated in the preface "... is not intended to replace the more complete texts and references on clinical therapeutics, but rather to provide a readily accessible source of material for every day use," this handbook should prove invaluable to the intern in whom the responsibility for therapy is usually first invested and whose time is certainly at a premium. It would seem undesirable for the junior student but of increasing value to the senior student who begins to concern himself with the therapeutic aspects of medical practice. It would seem to be of variable value to the practitioner depending on the individual's interest in keeping abreast of clinical therapeutic advances.

James D. Morgan

*HANDBOOK OF PEDIATRICS*, 4th Edition, by H. K. Silver, C. H. Kempe, and H. B. Bruyn. A Lange Medical Publication, Los Altos, California, 1961. \$3.50.

This little reference book has proved extremely valuable, as the appearance of its fourth edition emphasizes. Containing all of the necessary material in brief form for quick reference, it has been used with much appreciation by students and practitioners, and even by the professor who does not like to be caught off base by the knowing student who can consult his handbook.

This book can be well recommended for a general use in the field of pediatrics.

J. I. W.

*LIGHT COAGULATION*, by Gerd Meyer-Schwickerath, M. D. Translated by Stephen M. Drance, M. D., C. V. Mosby, St. Louis, 1960. Price \$9.50.

Light coagulation is in all probability one of the greatest advances made in ophthalmology within the past two to three decades. Outside of the use of alpha-chymo-trypsin for extraction of cataractous lenses, there is probably no other discovery that will come close to this in importance.

The uses of the light coagulator in treatment of various conditions of the eye is at the present time still in infancy, but it is certain that with the number of machines that are scattered across this country and in Europe further uses will be made of this rather expensive machine.

This small volume supplies fundamental facts about light coagulation of the retina and its application to external eye lesions, tumors and vascular proliferations. The descriptions on the instruments by the book are brief and to the point. Diagrams are adequate and the text is fairly readable.

The author explains the limitations imposed upon the use of the photo-coagulator by the type of lesion present and by the individual variations in certain cases. By no means does he present this machine as a panacea for all types of retinal detachments.

Because of the rather specialized use of this machine this book will probably be of interest only to ophthalmologists and those doing research work.

W. W. Vallotton, M. D.

*FOR YOUNG ADULTS ONLY* by Frank Howard Richardson, M. D. Tupper and Love, New York. 1961. Foreword by L. Nelson Bell, M. D. Price \$2.95.

This book for adolescents is just off the press. It is one in a series of 12, written by Dr. Richardson, over a number of years, which range from volumes on Motherhood and Nursing, to those specially directed to the problems of childhood, of mental health, adjustment to family life and also those of groups, as in school and in communities.

In the series, each of which is independent, there are 2 very valuable books, entitled "For Girls Only", and "For Boys Only." These quite logically preceded this volume, which is for young adults.

In this frank and easily read, very clear book, the author discusses many topics about which young people, particularly those at high school and college want to be informed. It fills a needed place, for most parents and many doctors too can not or will not, discuss matters of conduct, such as petting, dating, smoking, drinking, automobile driving, traffic fatalities and other topics of great importance to the youth of today.

It is remarkable that so much is covered in 21

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chapters. But far more remarkable is the fact that at no time is the young woman or young man preached at. Nowhere is there assumed a "holier than thou" attitude.

Richardson seems to realize, probably from his long experience with young people, and also from having observed his own five children pass through childhood, reach maturity and parenthood that the transition from being a child to an adult is often difficult. His children today are scattered all over the globe leading useful lives, and are outstanding personalities in their chosen fields. The success of his offspring are

a tribute to him and to his wife.

The author does not claim that parenthood is at all times a simple matter or without considerable care and worry, but he thinks that the task is worthwhile. Further he is of the belief that rigid discipline does not help. On the contrary, love and understanding are essential in parenthood.

To a doctor, a parent or a young adult, this volume should be of great help. Not only does it cover the subject well, but its style is attractive.

R. M. Pollitzer, M. D.

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### COMMON EMOTIONAL PROBLEMS OF CHILDREN: THEIR OCCURRENCE AND PREVENTION\*

ROBERT C. BROWNLEE, JR., M. D.

*The Christie Pediatric Group, Greenville, South Carolina*

In the everyday routine of office practice, whether one is a general practitioner or pediatrician, he sees many children with emotional problems; some of these problems are to be discussed below. These problems are not of major psychiatric significance in themselves, though they may lead to severe problems. However, they are real problems to the parents and, therefore, problems to the children. In dealing with children, their parents, and their problems, it is important to be able to differentiate between the relatively minor and the relatively major problems, so that we are able to know the ones with which we can be of some help and the more major ones which are beyond the scope of most of us and perhaps need referral to the psychiatrists. The majority of the problems presented in children, particularly in the younger children, are not of a major nature that require psychiatric help; yet some of them are, and in these few, with our inexpert probing, we may do more harm than good and, therefore, they should be referred for more expert help. However, the pediatrician and general practitioner can be of considerable help in the majority of the behavior and emotional disorders of the child and it is with this in mind that we present this discussion.

It is important also that we all realize and understand that some parents have such severe and deep-seated emotional problems of

The author sets forth here some of the common problems seen in the routine care of children. These include among others the jittery, colicky baby, feeding problems, temper tantrums, problems resulting from permissiveness, school phobias, enuresis and thumb sucking. Some pertinent points relative to the cause of these problems are outlined and an approach to the prevention of them is set forth. Emphasis on the importance of the general practitioner and pediatrician in their everyday contacts with the children and their parents is stressed.

their own that we may not be able to modify their approach to the child. But the majority of parents, with minor emotional problems common to all of us, can be spared many of the pitfalls of child-rearing if they are given proper guidance and instruction as they go along. Some people apparently feel that such guidance is impractical and too time-consuming, but I would disagree. As a matter of fact, a physician may save himself more time than he spends if he can help to prevent the problem rather than trying to solve it after it occurs. In addition, the saving in parental anxiety and the resultant diminution in the child's problem is more than worthwhile. It is a rather hopeless task to solve the problems of adults and our only hope for bettering humanity seems to be in trying to cut down as much as possible on the problems of the children of today as they go through the very

\*The material in this paper was presented as a lecture at the University of Oklahoma Postgraduate Seminar.

important formative years from the emotional standpoint — that is, the first five years of life. The remarks that we have to make about these various problems of necessity will be brief and sometimes too general and sometimes too arbitrary. The principles involved, I hope, will be of some help and importance to you.

For the sake of organization, the various emotional and behavior problems and the danger areas related to them will be discussed by age as they arise rather than by frequency of occurrence or severity.

*The "Nervous" Baby.* — One does not ordinarily think of emotional problems existing in the first few weeks of life, but they do occur and more often in the first born child. We have all seen the scared, insecure, under-confident, tense mother who isn't really sure that she wanted a baby and who can't understand exactly why she doesn't feel a gush of mother love the first time she sees this not-too-pretty new baby that is brought in to her. Of course, frequently there is some degree of rejection of a deformed child, but I am speaking primarily at this point of the normal newborn baby. In this situation we encounter the "jittery", colicky, crying, irritable, so-called "nervous" baby. He fails to respond to sedatives, colic preparations or anything else until his parents and, therefore, his environment become much more peaceful and secure. Thus we have the first emotional problem of childhood. Fortunately, most parents and children get over this situation, but others don't and this general situation may persist throughout childhood. Some of these children later turn up as very over-active children who over-respond to everything because this is the only response they have learned from their parents and they seem to feel that it is also expected of them. Most of us have been confronted with the child who pulls the stethoscope out of your ears, tears up the paper on the examining table and makes a complete shambles of the room, the mother and you. This is what we mean by the over-active child.

The essence of prevention of this baby's reaction lies in the education of the parents and should start, if possible, during the mother's prenatal care. The general practitioner has a

unique position and opportunity to do this. One should try to instill confidence in the mother in her ability to do the job at hand, help her to avoid getting a pre-set idea of what she wants her child to be or to be like, propagandize her to accept things as they come, warn her that she might not immediately feel attached to the baby, remind her that it will take a while to adjust herself to the baby and the baby to her. All too often, prenatal care consists solely of caring for the mother's needs as an obstetrical patient without regard or attention to preparing her for her role as a mother. This is perhaps akin to handing a young teen-ager a new high-powered, well-tuned car ready to go, without first giving him driving lessons.

We will move on rapidly to the newborn period: While the mother is in the hospital, some time spent in instruction in the care and handling of her new baby is essential. She should be told as much as possible what to expect in all phases of the baby's reactions. She should not be handed a formula or told to nurse the baby and change the diapers. The details here are too numerous to go into, but let us say that detailed instructions to the new mother are absolutely necessary. Give her plenty of support and reassurance. Let us all remember that parents are not born experts, but are made. While we do not mention the matter to the parents, we know that the seeds of "deprivation of affection" may be sown in this initial rejection of the baby, if the mother becomes too upset by the endless details of its care.

*Early Food Rejection.* — A less common problem associated with eating probably comes next in the sequence, and we see this in the four to eight month old child and sometimes even earlier when prematurely advanced feeding schedules are instituted. This is the child who refuses all or most of the solid foods and fusses or screams every time his mother approaches him with a feeding other than breast or bottle. This usually results from an improper approach or attitude on the mother's part. She is afraid of feeding her baby and if he gags or chokes she goes off in a tail-spin and, of course, upsets the baby. This makes the feeding time unpleasant and therefore the

baby associates unpleasantness with foods and tries his best to get away from the unpleasant situation by screaming and refusing to eat.

The mother must realize that children vary as to the time they are ready to accept solid foods. The recent trend to earlier and earlier addition of solid food to the infant's diet in many cases only adds to this problem. We are forgetting at times that the normal infant up to about three months has a reflex to stick out the tongue to expel from the mouth anything put on the end of the tongue. This is not to say that many infants won't eat the food, but the mother must be aware of this characteristic. Here, again, calmness and confidence on the mother's part are essential. She must transmit her feeling to the baby that she is capable of doing what she is about to do and he will accept it much better.

*Sleep Resistance.* — Sleep resistance may begin somewhere around four or five months of age, but more commonly is seen at seven to ten months of age. We have all been confronted with the mother and father who say the child won't sleep and they are all worn out. The problem presents itself as a child who refuses to go to sleep and cries mightily when he is put down. Therefore, he is taken up again and the effort is made over and over again. Or, it may appear in the form of the child who goes to sleep only to waken repeatedly during the night. Each time he is taken up and an attempt is made to soothe him. He is put back to sleep, gets up again, goes down again, ad infinitum. This sleep resistance problem may happen to very sensible parents as well as to those with less insight and it usually starts very innocently. The baby begins to teethe, develops a respiratory infection and is awakened with a stopped up nose or earache or goes to visit away from home and gets his sleep habits out of order. Any of these everyday things may set off a sleep resistance problem. When he cries with this the parents rightfully try to calm and comfort him. The babies find this is most pleasant and being the self-centered individuals that they are, they decide to come back for more and more of the pleasantries. However, since they have an insatiable appetite for this sort of torture to their parents, they find themselves hooked and the

process is repeated purely out of habit. Then the less the child sleeps, the less he wants to sleep, the more irritable and tired he becomes. He frequently also becomes fussy in the daytime. The mother becomes upset and may come to find herself wishing that the child would just go away. Of course, it is obvious that this may lead to all kinds of general emotional disturbances as the balance of affection between mother and child is upset. This problem of sleep resistance may appear in children several months or even two or three years older than the seven to ten month group. When it occurs in the two and a half to three year old child it is a problem of major proportions and it is more than likely insoluble by routine methods.

About ten years ago Spock described this problem so well. This description and his treatment have stood up well. This situation happens so often to parents who are too permissive or to those who are caught temporarily in the trap of permissiveness when the child is sick. In the latter group this can easily be prevented by a word of caution to the mother of the seven or eight month old child whom you see with an otitis, whose mother says that she has been up off and on the past night or two with a crying baby. Tell her to expect this, but that in another night or two he will no longer be in pain and after this she should put him down and let him cry it out. It is as simple as that. With the too-permissive parent, however, much more detailed instruction is necessary. One needs to set reasonable time limits on bedtime to begin to form these habits in the child, to let him know what is expected of him and to let the mother gain confidence in herself and in her ability to handle the child. She must be made to realize that the child not only gets into trouble without reasonable control, but that he is miserable without it. This is often a most valuable object lesson to timid parents.

*Problems From Permissiveness.* — The months around one year of age are fairly clear of problems except those that arise from the situation of overly-permissive parents. These problems come throughout the life of the child, but this is as good a time as any to refer to them. These children have known very



few, if any, limits or boundaries. They do not know what is expected of them. Because of their inborn nature, which is essentially that of a completely self-centered, uncivilized savage, their desires cannot be satisfied. They then develop into dictators and one only has to remember recent history to know that it is impossible to satisfy a dictator or to compromise with one. This child is in the same position. He becomes unhappy. He doesn't know what he wants and when he gets what he thought he wanted, he immediately doesn't want it. These symptoms are made worse by the normally short attention span present in this age group. Recently I had occasion to see an analysis of some 13,000 case histories of alcoholics and the conclusion was drawn that a significant percentage of alcoholics developed from children who had had overly-permissive parents. If the torture of living with one of these individuals as children isn't bad enough, certainly this later specter of alcoholism should be enough to make some parents see the light, if it is possible for them to do so.

In discussing prevention of sleep resistance, I mentioned some of the problems associated with permissiveness. Other points pertinent to prevention can be made. It is necessary to point out to some parents that truly mature parent love for a child does not necessarily mean that one should be permissive with the child and let him rule himself and his family. This is more a flight from the true responsibility of parenthood rather than a manifestation of love. We try to prevent this very early in the course of our discussion with parents as they come in for well-baby care. In those parents where it is obvious that these tendencies exist or are developing, let us point out to them the necessity for early changes in their attitudes. Let us not be afraid to recommend positive action, but perhaps point out to the parents that while we can recommend this to them, it is their responsibility and opportunity to carry out these things and to enlarge upon these and other examples of disciplinary measures discussed in well-baby conferences.

*Eating Problems.* — Next in the sequence — around the 15 to 18 month old period — we will list an eating problem under emotional problems. Actually, the usual drop in appetite

or so-called physiologic anorexia is entirely normal here, but so frequently it is made a problem by parents who do not understand this. Then they attempt to force, nag, bribe or beg the child to eat. They try all kinds of tricks of entertainment — all to no avail. If the parent becomes obnoxious enough she makes the eating experience an unpleasant one and again the child associates food with unpleasantness and a problem is created that may last for years or even a lifetime. Unresolved, this may manifest itself later in one of two ways: Either the child maintains his rebellious approach — therefore he continues to dislike food and won't eat — or he knuckles under and, in an attempt to gain acceptance by this parent who is obsessed with the idea that the child must eat, he eats himself into obesity. Either situation is bad and propagates further difficulty.

These eating problems are very common and in most cases can be prevented. In attempting to prevent them, ordinarily we start at about the nine-to-ten-month old visit telling the parents about the expected drop in appetite which will occur later. We show the rapid and large weight gain of from 13 to 16 pounds (300% increase) which usually occurs in the first year and point out how tremendous the intake of food is here for size. Next, predict the expected weight gain of 4 to 5 pounds (25% increase) for the second and subsequent years and predict the appetite drop. As we give a reasonable explanation for these things, most parents are able to accept this, because it is so sensible. With later visits at 12 to 15 months, this same ground is gone over again and usually it sinks in. Now we begin to describe the usual diet of the 2 year old — that is, mostly meats and few vegetables — explaining that he shouldn't have a quart of milk a day, but rather about a half pint to a pint. Ask the mother who weighs five times as much as her child if she thinks she can drink five quarts of milk a day when her child drinks one. Perhaps this is taking unfair advantage of her, but it makes the point stick. These are not fancy psychological schemes, but just the facts as they stand and if properly presented the majority of mothers will accept them and we will have prevented an eating problem.

*Temper Tantrums.* — Temper tantrums occur to a varying degree in almost all children sometime between one and three years of age. Their persistence or marked frequency is the only situation in which we consider them a problem. This may occur from too few parental demands (permissiveness) or too many parental demands from the overly-strict parent.

As indicated above, in attempting to prevent problem tantrums we must harp on permissiveness again, for this breeds temper tantrums, so our efforts to prevent permissiveness by the parent pays off again. On the other hand, the too-strict approach also stimulates tantrums. Both these points must be made to parents. We need to tell all parents to expect tantrums, that they are normal, and therefore they must not be upset when they occur in their children. The mother must be warned that she cannot punish the child out of them or give in to his demands to try to stop them. Both approaches only cause more tantrums and thereby make a problem out of a normal thing. An appropriate attitude for the parent would most closely resemble boredom with the child's antics. This instruction in the handling of the occasional tantrum usually prevents the recurrent problem tantrums.

*Toilet Training.* — Also, at this age or hereabouts, we begin to encounter the problems associated with parents' efforts to get the child out of diapers and on to the toilet. Unfortunately, parents of a generation or two ago were taught that early toilet training was indicated and now those parents are grandparents and lots of education of the parents of this generation is necessary to counteract one or two words handed down over the years. Many parents do not realize that the mastery of urination and defecation is a matter of development rather than training. Those that do realize this often strive to get their child "trained" early in an effort to show that he is smarter than the child next door. Children of this age have usually developed some degree of negativism anyway and efforts to get them to do almost anything, much less to use the toilet, are met with resistance. All too often Mama tells the child "to come on now and have a BM for Mommy". The truth of the mat-

ter is that nothing could suit him less. Children seem to be rather proud of their stools. It is something they have produced for themselves and are not a bit interested in producing for Mama or anybody else. Often this results in the child's holding back and really making a problem. The resulting battle between mother and child can be rather fierce and prolonged. Since, as the psychiatrists sometimes say, this is an emotionally-loaded area, long-term and far-reaching emotional problems in later childhood and adult life may be the result.

Here again, the circumstances surrounding toilet training can be kept from becoming a problem only by an early start in educating the mother about its proper handling. This discussion should be started even as early as six months with some mothers, since they may have been told by someone to start putting the child on the toilet as soon as he can sit alone. Certainly as early as one year, we should tell the parents that the use of the toilet is an accomplishment attained usually around two years. Tell them that it is a matter of development and not of training. It seems unfortunate that the term "toilet training" has come into our vocabulary, for this indicates to the mother that this so-called training is her doing rather than the child's. If we can get it across to the mother that she should think of this in the same light that she thinks of walking — that is, that the child will do it when he is developmentally able — then she will be less likely to exert undue pressures on the child and she will have prevented a problem from developing from a normal physiological process.

*Negativism.* — We have mentioned negativism previously and this reaches its height around the age of two. This is not a true emotional or behavior problem, but rather it is a normal developmental phenomenon. This presents a problem only if the parents are not prepared for it or do not understand it.

Perhaps this sounds like a broken record, but we must prepare the mother for the appearance of negativism so that it does not become a problem to her and affect her feelings toward the child. Efforts should be made to help her to accept it for what it is — his uncertain attempts at trying to achieve some degree of independence. Help the mother not to

be too permissive or too strict in her handling of the child at this time — a large order!

*Sibling Rivalry.* — Perhaps this would be a good time to discuss the matter of jealousy and sibling rivalry, since frequently by this time the first child is around age two to three and a new child is coming along. Jealousy is frequently manifested by the child doing almost anything to obtain attention, since he feels pushed aside by the new arrival. At any rate, this seems to him a threat to his secure place in the family. It is common for him to do such things as emptying the garbage can in the middle of the floor, turning on the washing machine or making a bolt for the door, sans coat, when it's snowing outside — just as his mother gets settled to feed baby brother. These are but a few manifestations of his play for attention and the variations on this are as many as there are children with new babies in the household. When a mother says a child is "driving her crazy", try to find out why. Usually this is over-activity to attract attention.

This jealousy is a normal thing and parents must be told to expect this. Its occurrence cannot be prevented except by not having any more children, but this is too big a price to pay so we need to direct our efforts at modifying it. We try to help the parents to understand that this is a normal feeling. Then they realize the necessity for giving the first child positive attention rather than shunting him aside while everyone glows over the new arrival. The older child must be made to feel that this new baby has not and will not displace him from his secure position with his parents.

*Dawdling.* — Dawdling is a frequent complaint in the preschool and school age child. Part of this is normal. When it becomes excessive then it becomes a problem. Frequently this is an evidence of passive resistance on the child's part to nagging or excessively demanding parents. The child may not choose to rebel openly, but does so in this passive manner. An effort should be made here to get the parents to relax their controls and allow a little more independence.

*Lack of Independence.* — As the child gets older and more a citizen of a larger group than the family circle, we run into other prob-

lems. Parents come in complaining that their children won't play with other children or won't go next door without the mother or won't stay in Sunday School or he refuses to play well with visitors, etc. These things we see most often in children who have been over-protected and thereby not allowed to develop even normal independence for their age. In the slightly older kindergarten and early school age child this is also a problem, and for the same reason usually.

*School Problems and School Phobia.* — Now as we get to the school child the problems become more complex and oftentimes their causes are harder to pin down. Here we encounter the problems of adjustment to school or perhaps we should say adjustment to leaving home. Also, we commonly have to investigate the problem of the child who is doing poorly in school. Of course, this may be on the basis of inadequate mental capacity, but we are concerned here about those with adequate intelligence who, in spite of this, do poorly. These usually represent the immature children alluded to above or children emotionally disturbed for other reasons. So often this may be brought on by the fact that parents are prone to want to "push" their children. Too often parents are misled by the fact that the child may be of relatively high intelligence without this necessarily meaning that his emotional maturity has kept pace.

One further problem which should be discussed in the school age child is so-called school phobia. Many children have varied tension complaints about going to school such as anorexia at breakfast, abdominal pain, various aches, hay fever symptoms, etc. — all of which disappear after getting to school. These may be compared to stage fright which occurs even in an experienced actor. However, we are referring to the problem which has been defined as "an inability to go to school that results from an irrational dread of some aspect of the school situation". In brief, this stems from the fear of separation from the parents or so-called "separation anxiety". It is commonly seen in children of parents who actually promote this sort of thing by their pathologic need for the child to remain with them. It



frequently occurs in the mother with over-protective, over-permissive attitudes.

These school problems mentioned above may frequently result from a disturbed and deprived relationship between mother and child, especially in feeding and toilet training situations. This then points up the importance and necessity for preventing these earlier problems, and they can be prevented. As mentioned above, over-permissive attitudes on the part of parents lead to this sort of problem. Too often the parent is over-permissive in an effort to compensate for guilt feelings or hostile feelings of lack of acceptance of the child. We have pointed this out from the onset, so we have come a full circle already in that we are seeing secondary problems from a primary problem that perhaps could have been prevented or at least modified.

*Thumb Sucking.* — We have purposely left two other problems until the end, since they do not particularly present themselves as problems according to age. The first of these is thumb sucking. There is much heated discussion, many misconceptions and very little rational approach on the part of most people to this situation. First, let us state that this is really not a problem to the child unless it is made so by the parents' attitude toward it. It is a normal habit which occurs in approximately 55% of infants. In the vast majority of patients, no dark, sinister meaning of insecurity or lack of affection should be attached to it. Of course, there are a few children in which some emotional upset may be associated, but these are unusual, and almost always there are other symptoms of more significance.

Thumb sucking is usually worrisome to mothers and yet such a pleasant pastime to children. In an effort to prevent this from becoming a problem to the parent and child, we should begin by educating the mother to accept this as a normal habit from the moment we know that the child is thumb-sucking. Most mothers will accept an infant who does extra-curricular sucking and yet she will get upset with an older child about it. If we can assure her that this is a normal habit, that it does not

indicate insecurity, that it will not necessarily result in teeth abnormalities, etc., then we can preserve the normal mother-child relationship and thereby prevent this from becoming a problem. When a mother says, "my child is thumb sucking and what should I do about it", we try to tell her to do nothing about the child but to work on her own feelings about it. This approach does work, though it may take a good bit of brain-washing.

*Enuresis.* — The second problem is that of enuresis. Let us define enuresis. This is a persistence of night wetting or day time clothes wetting beyond the age of five years. Night wetting before this age in many children is a perfectly normal thing. Others may be dry as early as one year, but this doesn't mean they all should. It is important to make this age distinction because if the parent is aware of this, then we may prevent prolonged enuresis by eliminating the early apprehensions, for this in turn results in pressure on the child. The etiology of true emotional enuresis in the older child varies and the following causes may be listed: severity of toilet training, regression under psychological stress, fantasied mutilation after surgery or injury, identification with an incontinent parent, etc. Severe emotional upsets such as these present problems which are probably best handled by the psychiatrist. The many regimens of treatment and gadgets available may rarely be of help and usually may cause only further conflict in the parent-child relationship.

In our efforts at prevention of enuresis or of this becoming a problem to the parents and child, we must refer again to the definition which indicates the persistence of unusual wetting beyond age five years. If this one point can be gotten across to the mother of the child at age two, three and four, then by this simple means alone we may prevent the problem, because in so doing we have been able to keep the parents from putting pressure on the child, to keep them from punishing him or shaming him, etc. Some cases, of course, may have more deep-seated causes. One of which, as previously mentioned, was severity of toilet training. Here again we are coming to secondary problems that might not have arisen had we

prevented the problem associated with toilet training in the first place.

You will notice that we have emphasized almost entirely the emotional problems of the younger child. This has been done out of necessity because we started out by stating that we were discussing the majority of the problems that we see or the so-called minor emotional problems of children. As a child grows older, the problems are almost always more serious, and may assume major proportions. Besides, it is our distinct feeling that we have a chance of modifying problems only in the first few years of life and that if we have not been able to modify the parents' approach to their children by the time the child is five or six, then the situation becomes relatively hopeless in the hands of the average practitioner.

These, then, have not been, by any means, a complete list of minor childhood problems, but problems that can be prevented in many children with the proper guidance to parents. You may have noticed that we have not indicated any unusual or dramatic preventive measures, but mainly have tried to get across an attitude or approach. This approach is mainly concerned with the education of the parents, sometimes a truly difficult job, but yet it can be accomplished to a very satisfactory degree. This works, but it takes time. Yet you may save time, for it is much easier to prevent these problems than it is to solve them. Perhaps our only role as pediatricians and general practitioners in emotional problems is that of prevention, and perhaps we might well leave the role of treatment to the psychiatrists.

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## THE DEATH OF STONEWALL JACKSON

T. F. HAHN, JR., M. D.

*Deland, Florida*

May 2, 1863 was the date! Chancellorsville! One of the greatest battles of strategy ever fought had begun that morning. General Jackson with 28,000 men had marched to the left, leaving Robert E. Lee with 15,000 facing 60,000 Federal troops. To get to Hooker's right flank Jackson was taking a roundabout way in order to take him by surprise. Jackson's men marched all morning. At 1:00 p. m. they rested, as Fitzhugh Lee had found the enemy and his dispositions. By means of the Brock road from the Catharine Furnace, Jackson kept north until he was well beyond the right flank of Hooker's division at Melzi Chancellor's. Between 1:00 p. m. and 4:00 p. m. the brigades of Lane, Pender, Heth, Rodes, A. P. Hill, Colston, Ramseur, and Paxton—all commanders under Jackson—had been brought into position against the right flank of the Federals which "hung in the air". At 4:00 p. m. they deployed in the woods. At 5:15 p. m. the battle was joined and Jackson savagely hit the lines of the Federal troops stretching from Chancellor's northwestward to

the fords of the Rappahannock. The roar of battle proceeded, shell and shot screaming with the noise and yells of the troops charging forward.

By 7:30 darkness had fallen, the Confederates had broken the Federal lines and proceeded beyond Melzi Chancellor's toward Chancellorsville two miles away, where rested the main headquarters of the Federal armies, whose main lines had been kept busy by Lee's feints during the day. The charge was so tremendous, the pursuit so hot, that the Confederates had difficulty in keeping their lines. As the moon rose there was much confusion and a tendency for the right of the Confederate line to fall back. Jackson's order was still "Press onward, press onward", but because of the confusion and the slowing up of the right between 7:30 and 9:00 p. m., he and his staff rode forward to see if by continued attack the Confederate troops could double back the right wing of the Federal army to cut off their retreat.

About 9:00 p. m., Jackson with his staff had

come up to the front lines. He told his troops that the enemy had been routed and urged them to press on. Having later gone even further forward through his own picket lines, Jackson's staff became solicitous for his safety and urged him to go back, so he turned his horse and proceeded to his own lines. While riding along silently opposite a weatherbeaten house known as Van Wert's, suddenly from the south of the dark road came a shot, and a volley roared through the woods.

"Cease firing, cease firing," General Hill's voice rang out, but the nervous soldiers in the front line, believing the order to be from the Federals, poured out another volley. Jackson, whose horse had suddenly swerved and dashed away toward the north into the woods, suddenly ran into a long flash of fire, a volley by a kneeling line. Instantly he had been hit. His left arm fell limp; he lost his grip on the bridle, and a bullet struck his uplifted right hand. At almost the same moment he had a sudden blow from a bough that almost unhorsed him.

Desperately, and in spite of his wounded hand, Jackson began to pull in the frightened horse. Then as he felt himself grow dizzy, another officer dashed up. When asked how he felt, the General replied weakly that he could not move his fingers on the right hand and that the left arm was broken. When Wilbourn attempted to reach up and straighten the arm the pain was so torturing that Jackson had to say "You'd better take me down." As he fell toward Wilbourn he almost fainted.

Quickly a number of officers gathered around Jackson inquiring about the pain. They were assured that he was quite painful, especially the broken arm. His blood filled gauntlets were removed to lessen the pain in his arms and his sword and belt were removed. A drink of whiskey revived him slightly. Lt. James Power Smith tied a handkerchief about the wound as a tourniquet and tried to make a sling for the broken arm. It was noted at this time that the blood had begun to clot.

A few minutes later the assistant surgeon of the brigade arrived and examined the General but decided not to apply a new tourniquet. The next move was to start Jackson back toward the base hospital, but worry was con-

siderable concerning the possibility of starting the flow of blood again. However, this seemed a smaller risk than being captured or hit with other projectiles.

Stumbling even with help, Jackson tried to walk back, but soon was so faint and so exhausted that litter bearers were finally prevailed upon to put him on a litter. As the litter was conveyed backwards heavy cannonading and Minie balls shot down one of the bearers so that Jackson was almost thrown to the ground.

Alternately stumbling with the litter and resting between volleys the General was brought to an ambulance which was found in the woods. Soon the ambulance, in which Jackson was placed along side of severely wounded General Crutchfield, reached Melzi Chancellor's. After much pain and faintness had caused the General to ask a number of times for "spirits" he found here his medical director and friend, Dr. Hunter McGuire, for whom Jackson had not merely respect as a professional man but affection as an individual.

This was history; next comes the clinical story.

Preliminary examination of General Jackson by Dr. McGuire at the forward aid station at Melzi Chancellor's house disclosed that the handkerchief applied as a tourniquet had slipped. This was readjusted and reset. The patient was suffering intensely. His hands were cold. The skin was clammy, the face pale and the lips compressed and bloodless. No groans escaped him. Not a sign of suffering was revealed except the slight corrugation of his brow. The face was rigid, fixed, and the thin lips tightly compressed so that the impression of his teeth could be seen through them.

As soon as bleeding was staunched, Jackson received whiskey and a dose of morphia. These had prompt effect and in a few minutes he was less sensitive to pain. Since he seemed much relieved the ambulance was started to the field hospital, nearly four miles to the rear.

Throughout the ambulance trip to the base hospital Dr. McGuire kept finger pressure on the severed artery so that if the handkerchief tourniquet should slip again there would be no



further bleeding. During the trip the patient conversed with his surgeon and was determined that the confusion of the night should not be increased by demoralization which often follows the report that a leader has fallen. Every time Jackson heard the question, "Who is wounded?" he would prompt McGuire to say, "A Confederate officer".

Shortly after 11 o'clock the ambulance reached the old tavern where the Second Corps hospital had been established on the fringe of the wilderness. A warmed tent had already been prepared by Dr. Harvey Black, surgeon in charge. On arrival the General received more whiskey, was placed on a cot and given abundant blankets. He seemed to come back to life; the pulse became stronger; his body became warm. At midnight his condition was about the same.

At 1:00 a. m., May 3, 1863, Dr. McGuire waited for a stronger pulse and a clearer mind. At 2:00 a. m., Dr. McGuire with Dr. Black, Surgeon Walls and Dr. R. T. Coleman, chief surgeon of Jackson's old division, stood around the General in consultation. Dr. McGuire informed him that chloroform would be administered to make a painless examination of the wounds. When informed that examination might reveal a condition requiring amputation, General Jackson spoke weakly but firmly, "Yes, Dr. McGuire, do for me whatever you think best."

Preparations began. Dr. Coleman quietly rubbed over Jackson's face a protective salve and the surgeon then folded the cloth into the shape of a cup. He placed two drams of chloroform into this cup and placed it over the patient's face. After a few deep breaths, Jackson began to feel its effects. The words "blessing," "blessing" came often, but slowly and jumbled as he relaxed and became insensible.

Examination of the wound on the right hand was made by Dr. McGuire. A round ball had entered the palm, breaking two bones and lodging under the skin at the back of the hand. The bullet was removed and was found to have been fired from a smooth bore Springfield musket, a weapon much used by Confederate troops at the time, but already discarded by the Federals.

Examination of the left arm disclosed an

ugly wound. A ball had entered three inches below the joint of the shoulder, had divided the main artery, shattered the bone and passed out. In the forearm a third bullet had struck about an inch below the uplifted elbow, with a wound of exit on the inside of the arm just above the wrist.

McGuire and the rest of the men shook their heads. Conditions were as they had feared. This member was not to be saved, so badly damaged was it with lacerations and loose bone fragments. To prevent gangrene and useless anguish, amputation had to be performed at once.

While Dr. Coleman continued to administer the chloroform and Dr. Black watched the heart action, Dr. McGuire swiftly made a circular incision and sawed off the bone while Dr. Wall ligated the arteries. With so many experienced hands, little blood was lost. After dressings were applied and the anesthetic withdrawn, the salve was wiped off to permit treatment of the wounds of the face. All these were found to be superficial, caused by tree limbs. They were treated with isinglass plasters. For 30 minutes after cessation of the anesthetic the patient remained on the borderline of consciousness, then received a cup of coffee which he was able to retain.

One hour later Major Pendleton broke into the hospital with the news that A. P. Hill had been wounded and Jeb Stuart had accepted the command of the corps. When Jackson was asked for his advice, he was so weak and feeble that he finally could merely whisper: "I don't know. General Stuart must do what he thinks best." The patient's condition at this time was considered satisfactory as to heart action.

On May 3, 1863 at 9:00 a. m. the patient awoke, took some nourishment and displayed a cheering resilience. Prognosis appeared favorable. None of the doctors in attendance seemed to have any fear for his recovery and the patient dictated a note to General Lee informing him of his success. At 10:00 a. m. General Jackson felt so much pain in his right side that Dr. McGuire made an examination. After careful examination of the patient's chest, abdomen and back, no bruise was discovered,

no broken ribs were indicated, breathing seemed to be normal. Local applications were ordered and Dr. McGuire felt no special concern. The patient continued to suffer the rest of the morning, but seemed strong enough to converse briefly with his chaplain.

At 2:00 p. m., May 3, 1863, the patient was relaxed and quiet until disturbed by messengers from General Lee. General Lee commanded Dr. McGuire to turn over all other duties to the senior surgeon and himself attend the General and to remove Jackson to a place less exposed. Whether the journey to remove the patient was to be made the next day was to be determined by Jackson's condition which hourly seemed better. By nightfall he was rid of the pain in his side.

On May 4, 1863, General Jackson having slept well, it was the opinion and judgment of his surgeons that he could now look forward to a normal convalescence. An all day journey removing the patient by ambulance was soon under way. Throughout the journey General Jackson was active in conversation with all with whom he came in contact. There was no confusion of mind and no fatigue. He had no symptoms of distress until later in the day he became slightly nauseated.

Jackson had previously used the "water cure" of Farmer Vincenz Priessnitz and he now asked that wet towels be applied to the abdomen for this distress. This was done with Dr. McGuire's consent. The result whether psychological or physiological was entirely to the patient's satisfaction.

This long journey of 27 miles came to its end at 8:00 p. m. The place of hospitalization chosen had been Chandler's at Quincy's Station. When the ambulance arrived there, the place was full of refugees and sick and wounded soldiers. Because there had been erysipelas in the main house, Dr. McGuire decided that the General was to be given the disposal of the office in the yard, a building which had two or three rooms and could be made into a small hospital. In this abode he was immediately comfortable and relaxed, ate some bread, drank a cup of tea and then fell into a normal sleep.

May 5, 1863: Jackson awoke in good condi-

tion, though he felt he had rested less during the night than actually he had. Dr. McGuire early on May 5 examined the wounds. The one on the right hand was giving little pain, but McGuire thought the hand should be splinted to keep fragments of bone at rest. This was done. No serious infection was discovered. The stump of the left arm was doing equally well. Parts of it were healing by first intention. Granulations were observed. The patient ate with heartiness and began to speculate on the length of time that he would be absent from duty. He was quite cheerful. At 10:00 a. m. Tuesday morning, May 5, General Jackson welcomed his chaplain who arrived to conduct bedside worship and to give the General the satisfaction of discussing religion.

The patient spent Wednesday, May 6, 1863, with no symptoms of other involvement and went into some lengthy discourse on theology and church history with his chaplain, A. C. Smith. After this long period of talk, however, his attention began to lag and it was obvious that he was becoming exhausted. Despite this weariness the day seemed to be one of consistent gain and encouragement. At 10:00 p. m., May 6, the patient went to sleep easily.

On Thursday, May 7, 1863, at 1:00 a. m. the General was awakened by nausea. As quietly as he could he aroused Jim, his servant, and told the negro to get a wet towel and apply it to his stomach. Jim was vaguely conscious that this was the wrong thing to do, but Jackson refused to allow him to awake Dr. McGuire. Obcdiently Jim applied a wet towel to the General's stomach. The cold and dampness did no good. Sharp pains in the right side were added to the nausea. Moment by moment pain increased until it was almost unendurable. The General's frame was shaking with a chill but his resolution was firm. He would not wake his sleeping surgeon. Soon Jackson's pain was sharpened every time he drew breath. Agonizing though the pain was in the chest with each breath, the patient held out until the gray of dawn, then permitted Jim to awaken surgeon McGuire. Dr. McGuire listened to the chest, examined the painful areas and all too readily was convinced of what the patient himself suspected—pneumonia.



After the examination Jackson was not afraid. He did not believe pneumonia would kill him. Confidence, faith and ambition convinced him that he had more work to do. So to the attack on the disease that was assailing him! Preliminary to cupping, which would bring more blood to the affected side, Jackson was given morphia. The patient, of course, was then less sensitive to pain, but the drug threw him quickly into a stupor. From that hour the personality of General Jackson as his officers knew it, seemed to be in a haze; obscured and uncertain. His conversation became a muttering and though he used connected sentences, it was difficult to tell at times whether he was rational or merely babbling.

About noon of May 7, 1863, when the doctors had done what they could, the patient asked for nourishment, and after having received lemonade, he stirred himself to greet his wife who had then arrived at his bedside, but so deeply was he under an opiate that he dropped off to sleep quickly. Later in the day he gained consciousness enough to recognize his wife and give her words of encouragement and love.

At 2:00 p. m. Dr. Samuel B. Morrison arrived, examined the patient, who recognized him. Drs. Morrison and McGuire held a consultation, and as a result decided to call from Richmond the most distinguished authority on pneumonia, Dr. David Tucker. All the while the patient seemed half asleep, half delirious. He was able to rouse himself when called, but if left alone his mind would turn to the battle field. Despite this delirium the doctors did not feel discouraged, though by evening they could not dispute the seriousness of the malady, but believed he was holding his own.

On Friday, May 8, 1863, Surgeons Breckenridge and Smith of the Army Medical Corps had come at McGuire's request for consultation. These three and Dr. Morrison made as thorough an examination of Jackson's condition as was possible. The wounds appeared to be doing well, the discharge had diminished and healing was continuing. Pain in the side was no longer troubling the patient. Some of the surgeons were not sure his prognosis was good. The ominous conditions at this examina-

tion were his difficult breathing and his great exhaustion. Of his weakness Jackson himself spoke. Blisters were applied. Later in the day Dr. Morrison expressed a fear that the disease might not be overcome. To this Jackson listened without emotion, but said "I do not believe that I shall die at this time". Even after Dr. McGuire corroborated Dr. Morrison's opinion Jackson insisted that he would recover. Though he had a very restless night he did not appear to be shaken.

Saturday, May 9, 1863, found Jackson's breathing apparently less difficult and the pain diminished, but his weakness was manifestly worse. He still observed intermittently what was going on in his sickroom and that to the intelligent faces of his doctors around the bed another had been added, that of Dr. David Tucker, the Richmond authority on pneumonia. With his increasing weakness there was much fever, but he was still insistent on his probable recovery. When he asked to see his baby he beamed at her in no spirit of farewell.

Late in the afternoon of May 9 he had his doctors summon the chaplain. At the time Jackson's lung was so nearly filled that his breathing was very difficult. Such respiration as he had was shallow and cruelly fast. For these reasons Mrs. Jackson and his physicians tried to dissuade him against conversing with the chaplain. Cough had begun and produced "putrid" sputum. During the evening he listened to psalms and asked for singing of hymns. These seemed to have a quieting effect and he rested in what seemed to be perfect peace. During this evening all the surgeons in attendance felt that the end might not be far distant. During the night he lost ground. He seemed to get no relief except from cold sponging of his face and forehead. As he appeared to be sinking steadily, one of the physicians tried to get him to take a drink of brandy. He tasted it but refused the rest.

On May 10, 1863, Sunday, the patient was in a stupor. He lay in bed breathing hard, saying nothing. At about 11:00 a. m. the doctors informed him that this was his last day to live. Between muttering delirium and stupor he would rouse at times. Weakness was severe and extreme; pulse was rapid, thready and weak. He had much cough and very shallow,



rapid and difficult breathing. His face seemed now emaciated and strangely ascetic. When attempting to play with the baby he sank back into unconsciousness.

During the afternoon he lay almost unconscious, quiet except for stertorous, difficult breathing which was accompanied by some cough and a loud rattle in his throat. At 3:00 p. m., after a long, long silence during which only the breath in his throat could be heard, the patient said from his bed clearly, quietly and cheerfully "Let us cross over the river and rest under the shade of the trees." He then expired.

This is the clinical history of General "Stonewall" Jackson's death. Obviously the wounds with severe lacerations requiring sutures through major vessels, with much tissue damage had produced a pulmonary embolism which so often was diagnosed pneumonia or putrid pneumonia. The rapid onset during the night, the severe symptoms, the protracted weakness, the fever and chills, and the chest pain and cough all signify pneumonia. It does not seem too imaginative to suppose that this pneumonia, beginning with acute pleurisy, was an infarct of the lung due to a pulmonary embolism. As a clinical history it is interesting for this reason. Consider the difference between then and now. Morphine, cupping, blistering, strychnine, brandy and whiskey seemed to be the means with which to combat pneumonia. Contrast this to the present when oxygen and antibiotics have made so much difference.

But so much for the medical history.

Now let us consider metaphysics, briefly.

During Jackson's last hours when he first was told by Dr. Morrison that his disease might not be overcome, Jackson's answer was "I am not afraid to die, I am willing to abide by the will of my Heavenly Father." Later he told his surgeon, McGuire, "I see from the number of physicians that you think my condition is dangerous, but I thank God if it is His will that I am ready to go."

Later when his wife asked if she should read some of the psalms of consolation he shook his head vaguely but no sooner had he spoken than his discipline and will asserted themselves even in a stupor. Would he not heed the

Psalms, the word of God? "Yes," he corrected, "we must never refuse them" and then managed to add briefly, "get the Bible and read them."

Later when Mrs. Jackson had to ask the General, "Do you know the doctors say you must very soon be in Heaven?", he answered finally, "I prefer it" and repeated it carefully, "I prefer it." When she replied, "Before this day closes you will be with the blessed Saviour and His glory," he seemed to steady himself for the effort of speech and said deliberately, "I will be an infinite gainer to be translated."

At 11:00 a. m. of the last morning full consciousness seemed to return to him and when his wife told him that he was about to die he said, "Oh, no, you are frightened, my child, death is not so near." It was only when his surgeon replied that medicine had done its utmost that Jackson seemed to ponder and gazed upwards for a few minutes then, as in battle or when some shining deed was performed he would say "Good, good," he now seemed to think the orders of a high command had been given. His response was stronger, "Very good, very good. It is all right." With that answer he turned to the weeping wife and tried to comfort her. When he finally understood a question regarding where he wished to be buried he answered, "Lexington and in my own plot," but he spoke of it casually.

In accordance with the customs of the day, it seemed proper that the dying man say farewell to his child. The baby was therefore brought in by the nurse. He seemed to recognize the child and was much pleased to see her rather than to talk funerary details. Through the fog of morphine and weakness he played with his child and called her endearing names until he sank back into unconsciousness.

When next he was aroused, "Sandie" Pendleton was standing beside his bed and they conversed as to who was preaching at the headquarters for the Army. Jackson was gratified that his own chaplain was there by his forgotten order. He was also pleased that the men were to hear so eminent a preacher and when informed that the whole Army was praying for him he murmured, "Thank God. They are very kind. It is the Lord's day. My wish

is fulfilled. I have always desired to die on Sunday."

About 1:30 of the afternoon, when he was informed that he might not have two hours to live, his answer was "Very good. It is all right." And then came more of muttering and delirium and concern with the movements of the armies.

Thus died Stonewall Jackson.

How many of our patients today die in similar circumstances of faith, friendship and familiar faces? Consider the firm and abiding faith with which this man, from an almost miraculous escape from death by bullets, could suddenly reverse his hope and ardor for living to a complete peaceful acceptance of the inevitability of death. How many of our patients today, lying in hospital beds, in oxygen tents, with all sorts of sedatives to smooth the nausea and vomiting and pain—how many of them have this extra comfort, such as displayed in this story? Slowly this feeling of reverence for death has withered. All the miraculous medical wonders and material gains have not assured us of an acceptance

and an abiding faith. Patients and their families desire and demand by every known, unknown and half-guessed new medical research to prevent death with no clear conviction that every man must die. It is this very lack of a firm acceptance and faith in the inevitability of death, whether it is the Christian faith or whether it is some other type of faith which binds man to the infinity which is the universe, which has lost us one of our cardinal medicines. We have lost it in our seeking for medical miracles of a chemical or botanical origin.

I urge you therefore to examine this example of faith. Encourage faith in your patients. Converse with your patients about death. It is surprising how many patients are dying in hospitals alone, afraid—afraid even at the moment of death—afraid and unsure. The comfort of faith is as necessary as oxygen.

Thus was a case of pulmonary infarction. It was a great case, not because Stonewall Jackson was a great man, but because of its simplicity: the simplicity of the man, the simplicity of his clinical disease, and the simplicity, but yet the greatness, of his dying.

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## RECURRENCE OF MALIGNANT MELANOMA AFTER 21 YEARS

THOMAS R. GAINES, M. D.

*Anderson, South Carolina*

A white female, age 33 years, was seen on January 3, 1939, with the complaint of a "skim over the right eye for about a month, gradually becoming blind." She had no previous eye trouble, was in good health, had five children, the youngest of which was seven months of age. The vision in the right eye was light perception; in the left eye, 20/20. There was a dark mass in the nasal half of the fundus of the right eye extending back to the disc and as far forward as could be seen. Transillumination was defective on the nasal portion of the globe. A tentative diagnosis of melanoma of the choroid was made and immediate enucleation was ad-

vised. On January 5, 1939, under local anesthetic, the eye was enucleated. The specimen was sent to Dr. T. L. Terry, pathologist at the Massachusetts Eye and Ear Infirmary, who reported "malignant melanoma of the choroid and ciliary body, Spindle B type."

In November, 1959, the patient consulted Drs. Dickson and Clarke of Due West for weakness, lack of energy, and headache. She was seen again by them in August, 1960, at which time they reported "there were multiple, dark subcutaneous nodules scattered over the body, thought to have been melanomata." They referred her to Dr. J. H. Young of Anderson, who reported as follows: "Examination

revealed several nodules scattered over her body, a fairly large one under the mandible, another one on the posterior thoracic wall between the shoulder blades. These nodules were quite firm, were bluish in color, and were subcutaneous . . . the liver was enlarged down to the iliac crest, and one could palpate nodules in the enlarged liver through a rather thin abdominal wall. It was our impression that this did represent disseminated malignant

melanoma and that no treatment was indicated other than symptomatic."

I was informed by a relative of the patient that she expired on December 25, 1960. This case was thought to be noteworthy due to the fact that there was a 21 year interval between the time of the original lesion and of her demise from a similar condition. It is unfortunate that biopsy was not done during the last illness.

## TREATMENT OF TUBERCULOSIS \*

FRANK L. GEIGER, M. D.

*State Board of Health*

*Columbia, S. C.*

An inevitable result of the rapid advances being made in the chemotherapy of tuberculosis has been a change in the basic philosophy of treatment. With the introduction of agents specifically toxic for tubercle bacilli, it is apparent that now there is an opportunity for direct frontal attack upon the organisms which cause this disease. Whereas, formerly, therapeutic measures were strictly defensive, at the very best an indirect attack aimed at causing the disease process to subside by encapsulation, now the emphasis is on eradication of the parasite. Along with these advances has come the necessity for the clinician to understand as much of the fundamental aspects of the drug-parasite-host relationships as possible in order to be able better to care for his patients. As a result of these basic changes, the treatment of tuberculosis has become more complex than that of any other infectious disease.

Attempts to evaluate antimicrobial chemotherapy by means of roentgenographic and other less specific clinical studies have not been so profitable as preoccupation with the microbiologic phenomena in this disease.

The first, or short-term, aim of chemotherapy in tuberculosis is to convert the

sputum (or other body exudates) of as many patients as possible to a bacteriologically negative state as soon as possible with a minimum risk of drug toxicity, a minimum cost, and a maximum of patient cooperation. It is not enough, however, in a chronic relapsing disease like tuberculosis to aim merely at the bacteriologically negative state. It is equally important to avoid bacteriological relapse at some later date. The long-term aim of the chemotherapy of tuberculosis, therefore, is the prevention of bacteriological relapse with a minimum drug toxicity, a minimum cost, and a maximum of patient cooperation.

It is self-evident that failure either to attain the short-term goal of conversion of the sputum (or other body exudates) to a bacteriologically negative state, or to prevent subsequent bacteriological relapse constitutes a practical definition of failure of drug treatment. There are, actually, three types of failure. First, there is failure to achieve the bacteriologically negative state coupled with persistence of drug-susceptible organisms. Second, there is failure to achieve the bacteriologically negative state with the appearance of drug-resistant organisms. And, third, there is bacteriological relapse in which tubercle bacilli, whether drug-susceptible or drug-resistant, are once more present in the sputum.

The natural or acquired defense mechanisms of the body, of whatever origin, may

\*This presentation is primarily based upon observations made by Sidney H. Dressler, M. D., Chief of Staff, National Jewish Hospital, Denver, Colorado, at a meeting of physicians sponsored by the Section of Tuberculosis Control, South Carolina State Board of Health on January 26, 1961.



contribute to the effects of antimicrobial agents which have chemotherapeutic value in the treatment of tuberculosis. It is obvious that a great variety of tuberculous lesions can exist simultaneously in the lung of the patient with pulmonary tuberculosis. However, the immediate stumbling block in present day chemotherapy is the open cavity.

Tubercle bacilli are strict aerobes. Molecular oxygen is essential for multiplication of *Mycobacterium tuberculosis* in vitro, and also in vivo. This is of primary importance in the chemotherapy of this disease. There is quantitative relationship between the rate of bacterial multiplication and the rate of sterilization by each of the primary drugs, that is: isoniazid, PAS and streptomycin.

The persistent excretion of drug-susceptible tubercle bacilli by some drug-treated patients has been interpreted by many clinicians as evidence that the drugs employed exert a purely bacteriostatic—not a bacteriocidal—effect upon these organisms in man. Russell, Dressler, and Middlebrook have presented evidence that this phenomenon is more reasonably attributable either to inadequate dosage of drug or slow rate of multiplication of tubercle bacilli due primarily to oxygen deficiency.

Below are condensed, specific recommendations relative to the treatment of tuberculosis:

1. No patient should be treated for pulmonary tuberculosis unless the diagnosis has been established unequivocally by chest roentgenograms, thorough bacteriological evaluation which should include tracheal or gastric lavage in those patients who cannot expectorate adequate amounts of sputum, and a positive tuberculin test. If the chest roentgenogram shows evidence of pathologic changes in the lung and the tuberculin test is negative, other diagnostic tests are indicated to arrive at the cause of the lung disease.
2. In all active cases of tuberculosis, treatment should be started in a tuberculous sanatorium or hospital.
3. Isoniazid should be in every drug treatment regimen. Dosage should be 5 to 8 mg/kilo or not less than 300 mg/day. In about 25% of patients with active tuberculosis a higher dosage of isoniazid is

required to attain effective blood levels of their drug. In these patients 16 to 20 mg/kg/day of isoniazid is the dosage recommended. With this high dosage of isoniazid, pyridoxine in the dosage of 50 to 100 mg. per day is mandatory to prevent multiple neuritis.

4. PAS should be the routine companion drug in dosage of 12 grams daily or as close to this dose as possible. Drugs should not be stopped because of mild to moderate side effects, but continued at temporary reduced dosage.
5. Streptomycin, 1 gram daily, can be used in special cases in place of PAS but results are obtained only if the streptomycin as well as isoniazid is given daily. Intermittent (B.I.W.) use of streptomycin invites the development of resistance. Because of the possibility of permanent damage to the acoustic branch of the eighth cranial nerve, dihydro-streptomycin has no place in the present day treatment of tuberculosis.
6. In case of drug failures and relapses, other drugs may be used. These comprise a special category and are best handled in hospitals where the secondary tuberculosis drugs and surgical measures are available. The secondary drugs have a greater toxicity and require closer supervision.
7. If during out-patient treatment positive cultures continue to be obtained, the patient should be readmitted to the tuberculosis sanatorium for susceptibility studies.
8. After completion of the prescribed course of therapy (minimum duration of therapy of combined drug treatment must be at least two years) the patient must be followed by chest x-ray and sputum studies every three months for three years, after which it is recommended that the patient be followed at least yearly for the rest of his life.
9. Children through age three who are positive tuberculin reactors should be treated with isoniazid 5 mg. per kilogram per day for one year. By so doing, most serious complications of primary tuber-

culosis, that is, tuberculous meningitis, miliary tuberculosis, etc. will be prevented.

10. Recent tuberculin reactors (those who convert from a negative to a positive within a 12 month period) may be treated for one year with isoniazid.

#### *Conclusions*

The remarkable recent achievements in the chemotherapy of tuberculosis have made the treatment of tuberculosis more successful but more complex than it ever was before. The bacteriological status of the patient must be very carefully studied. The patient must be checked much more carefully for untoward reactions due to multiple drug treatment with potentially toxic agents. And, finally, if long-term therapy is to be followed conscientiously, proper motivation toward cooperation must be established in each patient. Home-care programs which were started on the basis of expediency have demonstrated that they are more successful if treatment has been initiated in a hospital.

The general principles of chemotherapy of demonstrably active tuberculosis can be summarized as follows. First, chemotherapy with two or more drugs should be initiated in adequate dosage in order to achieve the short-term goal of rapid conversion to the bacteriologically negative state. Second, early in-

creasing physical activity should be employed, as well as other measures of preventing, if possible, the achievement of the metabolically dormant state by the organisms in the patient's lesions. Third, all measures aimed at inducing the local anaerobic state should be avoided until either the short-term goal of chemotherapy has been reached or failure is imminent. All of these measures, in most cases, require hospitalization of the patient. Fourth, protracted treatment after bacteriologic conversion, whether with one drug or more, must be uninterrupted. This aspect of therapy may be carried out as the home-care part of the management of pulmonary tuberculosis, but again proper motivation of the patient looms large in assuring success.

The implication of this review is that most of the failures of chemotherapy of tuberculosis today can be attributed to employment of therapeutic measures which are not specifically designed to take maximum advantage of their potential. The common view that the available drug regimens have only a bacteriostatic action in man is not supported by the available experimental or clinical evidence. Indeed, it can fairly be anticipated that the still significant proportion of drug-treatment failures ultimately will be recognized as failures due to inadequate dosage and indiscriminate integration of therapeutic measures.

#### REFERENCES

1. Chemotherapy of Tuberculosis, William F. Russell, Jr., Sidney H. Dressler, and Gardner Middlebrook from the National Jewish Hospital at Denver and the University of Colorado School of Medicine.
2. Report of Committee on Minimum Standards of Chemotherapy for Tuberculosis, Thomas C. DeCecio, M. D., Chairman, Cliffside Park, New Jersey.

# FINGERTIP INJURIES

CARTER MAGUIRE, M. D.

*Attending plastic surgeon, St. Francis Xavier Hospital,  
and Roper Hospital  
Associate in plastic surgery, Medical College of S. C.*

JULIAN T. BUXTON, JR., M. D.

*Resident in Surgery, Medical Center Hospitals, Charleston, S. C.*

H. BIEMANN OTHERSEN, M. D.

*Resident in Surgery, Medical Center Hospitals, Charleston, S. C.*

Fingertip injuries are common. The majority of such injuries are inconsequential unless the injury involves fracture of the distal phalanx or loss of skin coverage. Simple lacerations of the pulp of the fingertip seldom are referred to the plastic surgeon. They are usually adequately handled by the family doctor. It is the purpose of this paper to discuss the approach to the more complicated injuries involving the fingertips.

## *Anatomy*

Except for gripping, the main body of the finger serves only to position the tactile pad located on the palmar surface of the distal phalanx. These surfaces of the fingers, which are rich in Meissner corpuscles, are the so-called eyes of the hands. These highly specialized nerve endings convey the sensation of stereognosis and are found in decreasing numbers in the skin of the forearms, arm and trunk. It is for this reason that finger skin should be replaced with finger skin whenever possible.

## *Etiology*

The most common injury involving the fingertip is the partial amputation of the skin and soft tissues of the distal half of the distal phalanx. The fingernail is frequently lost at the time of injury but the phalanx is usually not fractured. In children, this deformity is most commonly caused by the finger being caught in an automobile door. In these accidents, the fingertip is caught in the hinge side of the door on closing thus amputating the distal skin and soft tissues. As the pulp of

Amputation of the tactile pad of the finger tip is a common injury in manual industrial workers and in children. Treatment should be directed toward reconstruction of the injured finger in order to restore normal finger length, sensation and function. It is felt that the cross-finger flap operation will accomplish these ends in the simplest and most effective manner. Two case reports are presented.

a grape is squeezed out of its skin covering by pinching, so is the phalanx squeezed out of the amputated fingertip leaving the bone protruding from the injured surface.

In the adult, such fingertip injuries are usually involved in industrial accidents, such as those in which the finger is caught in the pulley of an electric motor or comes in contact with a power saw.

## *Treatment*

There are three general methods of repair:

A. The method of amputating the distal phalanx and closing the skin edges is mentioned only to be roundly condemned. This method produces a short finger which is a severe disability, particularly when the involved digit is the thumb, index or middle finger.

B. Since the periosteum is usually lost from the exposed phalanx, the use of free grafts is obviated since the avascular cortical bone will not support viability in a free graft. In the occasional case in which the periosteum remains intact, free grafts (split thickness or full thickness) are not suitable resurfacing agents, since they produce a thin covering with no

From the departments of surgery, Saint Francis Xavier Hospital and Roper Hospital, Charleston, S. C.





Figure 1

*The cross-finger flap has been elevated from the dorsum of the middle phalanx of the adjacent middle finger.*



Figure 2

*The full thickness graft from the groin has been sutured over the flap donor area of the middle finger.*



Figure 3

*The defect of the index finger has been cleaned and the cross-finger flap turned and sutured over the defect.*

padding and the graft becomes tightly adherent to the bone.

C. The procedure of choice is the use of a flap which would comprise full thickness skin, subcutaneous fat and an independent blood supply. The use of an abdominal or chest flap is undesirable for several reasons:

1. These flaps produce a finger with a crippled sensory apparatus in that there will never be any significant stereognostic sensibility present. Pain, temperature, light touch and deep sensibility will return in time but the ability to "see with the fingertips" is lost forever.

2. Immobilization of the involved extremity against the trunk of the body is required for two to three weeks, which is undesirable in the adult and all but impossible in the child. In the latter instance, a plaster cast is usually required.

3. Abdominal flaps are bulkier, differently colored and finer in texture than normal finger skin.

4. The fascial planes of the abdominal wall, being so thick, make it difficult to gauge the correct amount of subcutaneous fat to include in the flap.

It is felt by many that the use of palmar flaps simply creates a second deformity to correct the first. The donor area of palmar flaps usually have to be grafted for closure which frequently leaves a tender, relatively insensitive area in the functional portion of the hand. Leaving the donor area of the palmar flap open to granulate and heal by second

intention produces a similar, only worse, deformity.

For these reasons, a cross finger flap is much to be desired in this type of finger injury, especially in children. The fascial planes are clear, the resurfacing agent is normal finger skin and it carries an independent blood supply.

### *Procedure*

As in any other reconstructive procedure, the plan must be very carefully drawn up and outlined on the hand prior to surgery. The principle involves the elevation and immediate transfer of a flap from the dorsum of the adjacent finger. (Fig. 1). In most instances, a flap from the middle phalanx is used. The flap donor area is immediately resurfaced using a full thickness graft from the groin, (Fig. 2), and the donor area is closed by simple approximation of the skin edges. The wound of the injured finger is cleaned and the skin edges excised, if necessary, so that accurate placement of the flap can be accomplished. The flap is then turned and sutured over the defect. (Fig. 3). A bolus type dressing covers the graft. The hand is dressed and immobilized in the desired position using a simple wrap-around bandage. In the very young (newborns to 5 years), this dressing is left undisturbed until the final operation. In older patients, the graft dressing is changed and redressed after six days.

After approximately 18 days the root of the flap is released from the donor finger, trimmed and set-in to the proximal side of the defect.



Figure 4



Figure 5

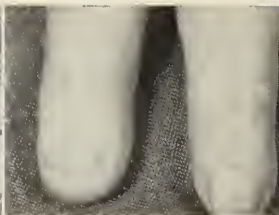


Figure 6



Figure 7

*Case 1. The tip of the right middle finger was amputated. The unfractionated distal phalanx protrudes in the wound.*

*Cross-finger flap from the dorsum of the ring finger used to replace amputated tissue of the middle finger.*

*Dorsal and palmer view of reconstructed finger. The fingertip is normal in length, appearance and function. Sensation has completely returned. Crack in fingernail reveals point of amputation.*

The root of the flap remaining on the donor finger is likewise trimmed and approximated to the graft for closure. Simple Bandaid type dressings are applied.

### Case Reports

1. The patient was a 35 year old white male who caught the right middle finger in an electric motor pulley on March 19, 1957. He was seen shortly after the accident. Examination revealed that the tactile pad and fingernail of the middle finger had been incompletely amputated and the phalanx was protruding from the wound. (Fig. 4). Grease was everywhere in the wound. X-rays revealed no evidence of fracture of the distal phalanx.

Under general anesthesia, the foreign material was removed from the wound. The jagged wound edges were excised. A cross-finger flap was elevated from the dorsum of the middle phalanx of the adjacent ring finger and sutured over the defect of the middle finger. (Fig. 5). A full thickness graft, taken from the groin, was used to cover the flap donor area of the ring finger. Postoperatively the patient did very well and was allowed to return home on the second postoperative day. The sutures were removed on the seventh postoperative day and at that time the graft and flap were in good condition.

On April 8, 1957, under local anesthesia, the cross-finger flap was released from the donor finger, trimmed to fit the proximal edge of the wound of the middle finger and set-in. The root of the flap was also set-in to the graft of the ring finger. The sutures were removed after seven days and at that time healing was complete.

When last examined this patient had a normal finger in function, sensation and appearance. The

fingernail has regrown and is normal in appearance. (Fig. 6 and Fig. 7).

2. A 16 months old male infant amputated the fingernail and tactile pad of the tip of the right index finger on October 28, 1957, when the finger became caught in an automobile door. Under general anesthesia, a cross-finger flap from the middle finger was used to replace the amputated tactile pad and the flap donor area was resurfaced with a full thickness graft from the groin. Because the patient was so young, the hand dressing was left undisturbed until November 15, 1957, when the flap was released and set-in to complete the surgery. When last examined on April 15, 1959, the finger was of normal length, appearance and function. As well as could be determined in so young a patient, sensation was normal.

### Conclusions

The cross-finger flap procedure is the best available method of reconstructing fingertip injuries involving loss of a portion of the tactile surface. In this manner, the injured finger is reconstructed with tissue which will develop normal sensation and will withstand normal wear and tear. The procedure is done in two short operating sessions and the patient is disabled only to the extent of having a portion of one hand bandaged for approximately two weeks.

### Summary

A procedure is described for the reconstruction of fingertip injuries which is peculiarly suited to such injuries in children.

# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH

#### Cardiac Rupture

DALE GROOM, M. D.

Department of Medicine

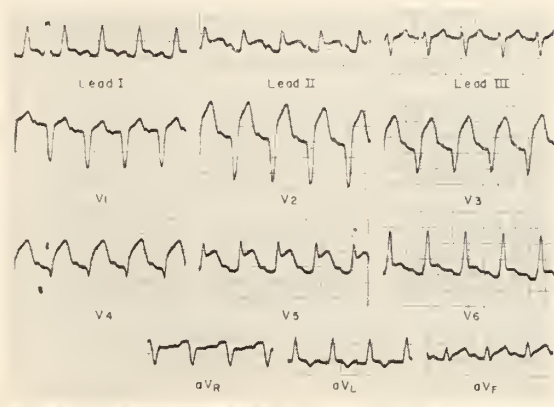
**Case Record**—What appeared at first to be a “good risk” case of myocardial infarction in a 68 year old lady turned out to be quite the reverse. It was her first infarction and she was admitted to the hospital within 24 hours after the onset of pain in the mid-chest and arms which did not respond to her usual recourse of nitroglycerin. Notable is the fact that she had been treated several years for hypertension.

Serial electrocardiograms were indicative of an acute antero-septal infarction. Presumably it was not too extensive as judged by a drop in blood pressure to the neighborhood of only 120-150 systolic over 80-100 diastolic, effective relief of her pain by moderate doses of morphine, relatively little rise in her temperature, sedimentation rate or white blood cell count, and a maximum transaminase peak of 117 units. Nevertheless anticoagulant therapy was instituted at the time of admission and maintained at adequate levels.

One week later chest pain recurred, this time accentuated by respiration and associated with weakness, tachycardia and a precipitate fall in blood pressure to 80/50. It remained low the following day when this tracing was recorded, gradually declined further throughout the next day when she became comatose and died.

At autopsy 450 ml. of clotted blood was removed from the pericardial sac. Clot was adherent to the epicardial surface of the left ventricle which was covered by a fibrinous pericarditis. A soft, grayish-yellow area of infarction extended from the anterior left ventricular wall into the septum. The anterior descending branch of the left coronary artery was completely occluded by thrombus at a point 3 cm. from its origin. Adjacent to its mid portion there was a 1 cm. rent in the free wall which freely admitted a probe into the cavity of the left ventricle and obviously constituted the hemorrhagic tract. Microscopic sections from this area showed the infarction to involve virtually the entire thickness of myocardium with necrosis, early fibrosis, interstitial hemorrhage and an organizing fibrinous pericarditis. Weight of the heart was 350 grams.

**Electrocardiogram**—The rhythm is a regular sinus one at a rate of 125 with normal AV conduction throughout (P-R 0.18). QRS complexes are slurred



and widened to 0.10, most of the delay being in the initial portion as shown in  $V_6$  where the intrinsicoid deflection of the R wave occurs 0.06 sec. after onset of the QRS. This is consistent with either hypertrophy of the left ventricle or some impairment in its conduction system.

As in her tracings of the preceding week, R waves are completely absent from  $V_1$  through  $V_4$ , suggesting that the antero-septal infarction is probably transmural. But whereas the S-T segment elevation previously had been largely confined to those leads (and had actually regressed almost to normal) now the segments are elevated in all leads except the one looking into the cavities of the heart,  $aVR$ . The reciprocal S-T depression there was not present in the earlier records. During the interim there was no significant change in QRS complexes which would indicate any further infarction.

**Discussion**—It is of course the case rather than the electrocardiogram which is illustrative of cardiac rupture. Essentially this tracing depicts an acute antero-septal infarction with very prominent S-T abnormalities. While the time of rupture of the myocardium cannot be stated with certainty, several observations suggest that it occurred the previous day: the sustained drop in blood pressure with tachycardia, the advent of pain accentuated by respiration along with widespread S-T segment elevations both consistent with pericarditis, as well as the large amount of clotted blood extravasated from the slit-like tear and the microscopic evidence of organizing fibrinous pericarditis. If so, her 48 hour period of survival following the catastrophe is unusually long for rupture of the free wall of the left ventricle.

One of the major complications of acute myocardial infarction is rupture of the left ventricle into the pericardial sac or, occasionally, through the septum into the right ventricle. Probably less common than



congestive failure, shock, arrhythmias or thromboembolic complications, rupture is variously reported to account for 5 to 10 per cent of the fatalities due to coronary occlusion. Understandably it is much more prevalent among patients with hypertension. At least some of the reported increased incidence (two to three times) of this complication in cases receiving anticoagulant therapy can be ascribed to the common practice of reserving anticoagulants for the "poor risk" cases such as those with multiple, massive or complicated infarctions. Like cardiac aneurysm, rupture of the myocardium is more apt to occur in patients who do not get adequate rest during the early stage of the acute illness and hence it constitutes a strong argument for complete bed rest during at least the first two weeks following occlusion. Transmural infarcts, producing softening and necrosis of practically the entire thickness of the ventricular wall, are most prone to rupture. And for reasons unknown, site of the break is located much more often on the anterior than the posterior wall. At times it may not tear completely through, allowing dissection between layers of muscle and giving rise to a localized bulge simulating aneurysm. (Independent of cardiac rup-

ture, minute amounts of gross blood are commonly found in the pericardium of patients treated with anticoagulants and probably account for some of the familiar fleeting pains in the chest on movement and respiration during convalescence from coronary thrombosis.)

Typically this complication arises about the seventh to tenth day after onset of infarction but can occur within the first two or three days. Pain, shock, cardiac tamponade due to hemopericardium and death within minutes or a few hours is the classical course of events. Tamponade was not noted in this patient in spite of almost double the usual amount of hemorrhage, perhaps due to a more gradual accumulation allowing time for the pericardium to dilate. Hence the diagnosis was not made ante mortem; indeed if it had been, this patient might have been considered for surgery. In a few cases such a lesion is conceivably operable as is rupture of the aorta. In retrospect, a bedside chest film showing a gross increase in cardiac size might have been helpful in differentiating rupture of the myocardium from perhaps the more likely clinical diagnosis, extension of the previous infarction.

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*Alcoholic cardiomyopathy*—W. Evans. *Amer Heart J*—61:556 (April) 1961

The patient with alcoholic cardiomyopathy is usually a middle-aged man. He is often overweight, and this is generally accepted as the cause of his moderate breathlessness, which is the common presenting symptom of alcoholic cardiomyopathy. If palpitation should be the chief complaint, extrasystoles may be discovered in addition to moderate tachycardia, or the arrhythmia may take the form of auricular fibrillation. Slight enlargement of the heart may be detected roentgenographically. Electrocardiography (ECG) is valuable. During the early phase it will reveal some form of arrhythmia, like extrasystoles from diverse foci. The T waves are deformed, presenting a spinous, cloven, or dimple design, patterns which are not seen in the ECG of coronary heart disease. Recognition of alcoholic cardiomyopathy at this stage is rewarding, because abstinence from alcoholic drinks can halt the march of fibrosis. When the diagnosis is missed, and the patient does not abstain from alcohol, more prolific myocardial fibrosis will develop and signs of heart failure make their appearance. These include a prominent venous pulse, systolic murmurs from mitral and tricuspid regurgitation, triple heart rhythm, cardiac enlargement, pulmonary congestion, hepatic distention, and edema. The ECG changes become more obvious, and the earlier distinctive T-wave patterns are submerged either by an arrhythmia, bundle branch block, complete heart block, or by a more frank inversion of the T. Alcoholic cardiomyopathy is often not recognized until it reaches a stage at which the myocardial fibrosis cannot be halted or improved.

*Experiences with relaxant drugs in cerebral palsy: 1949-1960*—E. Denhoff and R. H. Holden. *New Engl. J. Med.*—Vol. 264:475 (March 9) 1961.

A 12-year program of relaxant drug research in cerebral palsy is reviewed. Requirements for a relaxant drug are stated, and the importance of noting behavioral as well as neuromotor effects is stressed. Standardized methods of assessment and experimental procedures are described. In 4 of 8 drugs studied, placebo effect was greater than drug effect. Before indiscriminately accepting a new drug as beneficial in cerebral palsy, neuromotor and behavioral effects should be rigidly evaluated against placebo responses. Conclusions as to relaxant drug therapy must be made with caution until more objective methods of measurement are available.

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*Innocent murmurs*, Dale Groom, M. D. (Charleston) *South. M. J.* 54:253-256 (March 1961).

The differentiation of innocent from pathologic murmurs can be a most difficult decision, one which is not reducible to any simple set of rules. Certainly all systolic murmurs of more than moderate intensity and all diastolic ones are not necessarily indicative of heart disease. Nor are all faint ones benign—obviously the loud murmurs of advanced valvular disease are, in early stages, of comparably low intensity. Usually the decision entails consideration of the sound in the light of the patient's history and other clinical findings. It is one of "clinical judgment". As in the case of the accomplished musician who perceives more of the music he hears than does another, the training and experience of a physician weigh heavily in his evaluation of a murmur.



## President's Page

The meeting of the American Medical Association in New York the latter part of June should be watched by all members of the Association. Many decisions will have to be made by the House of Delegates, and it should be a workshop session. We, in this state, should be very much at ease in that we have two experienced delegates to represent us at this meeting.

There will undoubtedly be a lot of discussion of the pending legislation in Congress, and certainly some type of strategy will be mapped out for the county and state societies to go by. It is hoped too that South Carolina will be more in the spotlight during and after this gathering.

Meeting in New York, there should be a large attendance, and for those who have never attended a meeting of the largest medical association in the world, it should be a MUST at least once. The question has often been asked, "What does the American Medical Association do"? Well, the attendance at one meeting will go a long way in answering this question. Certainly a tremendous amount of work is turned out by the AMA.

We would like to see a goodly number of doctors from this state at this meeting.

Charles N. Wyatt, M. D.

# Editorials

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## YOUR OWN PUBLIC RELATIONS

Traditionally the medical profession, collectively and individually, frowns upon any form of advertising and its urbane cousin—Public Relations.

Today there is an urgent need to revise this feeling and to meet the growing need for the creation of a public image. This ten dollar Madison Avenue word has been over-worked and maligned. In its true context it means the presentation of a clear, concise and accurate view of a given profession to those who are non-members or laymen.

Leo Brown, Director of the Communications Division, American Medical Association, once defined the image or the public relations of the medical profession as "the mind's eye interpretation of the medical profession, as reflected in the mirror of public opinion." Today it is urgent that this mirror reflect a favorable picture.

Because of recent political maneuverings the medical profession in the United States faces the peril of appearing before the public with a muddled reflection. Worse still is the risk that we will wake up some day soon to discover that our medical profession has been socialized by dangerous Forand-type legislation.

Political pressure groups are continuing to urge Congress to sneak an insidious form of socialized medicine through the back door of "Social Security."

The fallacies in this plan, and the back-breaking load it would place on the incomes of many generations of taxpayers are not difficult to find *if* one takes the time to make a brief and thoughtful study. Unfortunately not everyone takes the time to understand.

All too often public opinion is shaped by popular images which have been distorted and colored to the specifications of welfare staters whose chief interest is public job holding. Such distortions are being made about our time honored profession every day.

Fortunately we do have many friends at court in the conservative, knowledgeable legislators who — working closely with the American Medical Association — blocked the disastrous Forand Bill and passed in its stead the Kerr-Mills Medical Aid for the Aged law last summer.

This single victory did not defeat the protagonists of the Forand Bill. The war will continue. If the medical profession is to win a final victory we must work consistently and diligently, each on his own battlefield. The battlefield is in your community. It is to you that friends, business associates and patients look for their impressions of the American Medical Profession. It is for them that we must create a clear and accurate picture of medicine today. It is up to us to show them the whole picture, not a splash of color in one isolated corner.

We are depending on each of you to help in the creation of this unclouded image by replacing loaded propaganda with facts.

You can make these facts known through daily conversations with your friends, neighbors and business associates. You can help by taking a few extra minutes to see that your patients have received—through your office—some of the excellent pamphlets on medical care legislation prepared by the American Medical Association. (These pamphlets are available in any quantity through the office of the public relations chairman of the South Carolina Medical Association.) You can impress upon your patients the need to read and study these pamphlets so that they may formulate their own opinions.

Finally, you can help by taking an active part in your county medical society's activities—such as the speakers bureaus now in existence in 21 county societies.

There is no time to lose. The ammunition is considerable but it will serve no purpose if it remains silently in the magazine.

J. M.



## THE STINGING SEASON

The universal fear of poisonous snakes—in fact of snakes of any kind by most people—has overshadowed the danger which is present in the poisonous sting of bees, wasps, and spiders. Figures compiled a few years ago show that bites from these insects were more dangerous in point of mortality than were those of snakes. While 71 deaths from snake bites were reported, 85 occurred from stings from various bees, wasps, hornets, etc., and 39 resulted from the bites of poisonous spiders. Probably these figures are not accurate and probably are too low, and also it is likely that many deaths attributed to other conditions such as heart attack, were actually due to the poisonous bite.

Death from bites of these insects is often very rapid, and results from either a shock reaction or pronounced allergy in the victim.

Promising efforts are in progress to develop an immunizing substance for those people who are likely to be stung or who are known to have severe reactions to bites. This seems to be still in the process of investigation, but offers some preventive measures for the future.

For years, you've been exhorted to take a greater hand in A.M.A. affairs. But the greatest hand at the A.M.A.'s recent midwinter meeting went to a doctor who dared to suggest that his committee's affairs weren't worth your attention. Here's the entire report of Dr. George D. Johnson, chairman of the Reference Committee on Sections and Section Work:

"Mr. Speaker and members of the House of Delegates: The committee met. There was no business to transact. We wish to thank all those who did not appear. The committee felt that it was a most successful meeting and, having no business to attend to, promptly adjourned. Mr. Speaker, I move the adoption of the report as a whole."

Dr. Johnson's motion was quickly carried—with acclamation.

*Medical Economics*

Pills, Poetical and Philosophical Prescribed for the Purpose of Purging the Public of Piddling Philosophies, of Puny Poetasters, of Paltry Politicians, and Petty Partisans By Peter Pepper-Box, Poet and Physician.

—Charleston Courier  
January 3, 1810

## REPEATERS

While the editor does not presume to pose as a grammarian, he is still entitled to view with alarm some of the oddments of writing that continue to creep into a fairly permanent place in the current medical usage. Undoubtedly some of the queer expressions originate in the fertile but ungrammatical brains of medical students and house officers, transfer themselves to the attending staff, and eventually are off for the press, especially for those journals whose editors do not quibble at minor peculiarities of writing.

Today's alarmed view is on the subject of the word "repeat" which seems to be assuming an adjectival character which the most corpulent dictionaries do not endorse. "A repeat urinalysis," "a repeat blood count," probably evolved from the admonition to "repeat the urinalysis," or "repeat the blood count," and became examples of a variant of the popular pastime of verbalizing nouns (e.g. "to cystoscope"). "Repeat" in this usage appears currently in some otherwise estimable journals. For the sake of the language it might better be scotched before repeat is repeated too repeatedly to avoid a "repeat" and established repetition.



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ASSOCIATION  
1961-1962**

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Dr. R. Cathcart Smith	1961-62—1 yr.
903 Bell St. Conway	
Ex-Officio:	
Dr. Robert Wilson	Dr. Charles N. Wyatt
165 Rutledge Ave. Charleston	301 E. Coffee St. Greenville

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### ERRATUM

In the June issue the list of the Executive Committee of the Council and the Committee on Emergency Medical Care was included erroneously with an item concerning the Alumni Association. The list is repeated below:

### EXECUTIVE COMMITTEE OF COUNCIL

Dr. John M. Brewer, Kershaw, chairman  
Dr. Alfred F. Burnside, Columbia, vice-chairman  
Dr. William L. Perry, Chesterfield, clerk

### COMMITTEE ON EMERGENCY MEDICAL CARE

Dr. William C. Herbert, Jr., Spartanburg—1-yr. term  
Dr. Charles R. May, Bennettsville—2-yr. term  
Dr. J. Graham Shaw, Columbia—3-yr. term  
Dr. Robt. S. Solomon, Moncks Corner—4-yr. term  
Dr. Raymond E. Ackerman, Bethune—5 yr. term

## THE NEXT SCIENTIFIC PROGRAM

The scientific sessions of the annual meeting of the South Carolina Medical Association will be held on 9 and 10 May 1962 at Myrtle Beach. The following paragraph is an appeal for the membership to take an active and constructive interest in the development of the program. Please note, especially, the request for abstracts of papers which members of the Association may present.

The Program Committee of your Association is now hammering away to produce a scientific session which is calculated to arouse your interest, supply your intellectual needs, and invite your participation. In order to fulfill the first of these objectives, your Committee would appreciate suggestions as to topics and techniques of interest to you. To aid in the second category, your Committee would welcome specific names of speakers of unusual talent, both from among the membership as well as from the profession elsewhere. The third objective may be the most rewarding of all. The Committee earnestly requests that as many as may accept the challenge submit abstracts of 100 to 300 words in length of proposed papers which might be presented during the scientific sessions. It is hoped that many will be submitted so that those specifically suited to the overall tenor of the program may be selected. It is the Committee's desire that not less than three papers, 15 to 20 minutes in length, may be scheduled from this source. These abstracts should be in the hands of the Program Committee not later than 1 September 1961. You will then have eight months in which to polish up the details. Give it a try! Be reminded, chances are your schedule will not become less busy; your time will not become less dear; DO IT NOW!

Forde A. McIver, M. D., Chairman  
Program Committee  
16 Lucas Street  
Charleston 16, S. C.

## Correspondence

Friday, May 26, 1961

To The Editor:

In the last 48 hours two patients referred to the Medical College Hospital for dialysis on the artificial kidney have died in the ambulance on the way to the hospital. In the last four weeks two other patients have died so shortly after reaching the hospital that nothing could be done for them.

These four deaths in such a short period of time indicate a need to set forth once again certain ideas about the use of extra-corporeal dialysis in the treatment of renal failure. Even though the mortality rate for those undergoing dialysis (the unfavorable group who probably would not survive conservative treatment) is above 50%, those patients salvaged represent a worthwhile accomplishment.

The perfection of many technical advances has made efficient dialyzing units widely available. There has been a formidable body of experience with these units accumulated in the past few years. Groups of physicians working with these units are almost unanimous in saying that their early and frequent use in the course of renal failure will result in much higher salvage rates than expectant treatment of very ill

patients. Although the uremia and hyperkalemia of conservatively treated, acute renal failure can be ameliorated by hemodialysis even late in the course of the episode, the accompanying complications of shock, bronchopulmonary infection, bacteriuria, severe anemia, pyelonephritis, gastrointestinal hemorrhage, cardiac failure, a variety of toxic psychoses, etc., which accompany this form of uremia make the survival of patients who have been allowed to become densely uremic problematic.

Therefore, some revision of many widely held ideas about the use of dialyzing units is in order. The use of extra-corporeal dialysis should not be looked upon as a last ditch heroic measure to attempt to save a dying patient. Rather, when oliguria becomes manifest, consideration of the place of hemodialysis in the treatment of such patients should begin immediately. Experience indicates that individuals with no urine output, or urine output of less than 200 ml. per 24 hours, will more probably need to be dialyzed than not. The presence of high fever, a broncho-pulmonary infection, jaundice, or severe anemia, or the post-operative state remarkably increase the likelihood that dialysis will be needed. Dialysis is much more often

necessary in post-partum patients than in any other group. It should also be remembered that individuals who are post-traumatic and have large amounts of either infected, bloody, or macerated tissues retained in the body are more apt to require dialysis.

Accordingly, the hemodialysis team at the Medical College Hospital recommends to the profession at large in the state that patients with actual or suspected acute renal failure be referred for hemodialysis within 48 hours of the emergence of renal failure. Although this policy will result in the unnecessary referral of some patients, it will doubtless eventuate in the survival of some such as those whose deaths have occurred in the last month.

In summary, it can be stated that the technique of hemodialysis has been perfected so that it can be undertaken as something less than a desperate emergency procedure. Anuria or severe oliguria in ill patients is tolerated for a very short period of time. Early referral to a center where a hemodialysis unit and team are available will eventuate in the salvage of the lives of a significant group in whom the so-called conservative management can be predicted to fail.

Cheves McC. Smythe, M. D.

Arthur V. Williams, M. D.

John Buse, M. D.



## BLUE CROSS . . . BLUE SHIELD



The medical profession in 1960 received more than \$731,000,000 from the 74 nationwide Blue Shield Plans for care rendered members, the National Association of Blue Shield Plans reported recently.

"The \$731,131,187 paid to physicians represented an all-time high for a one-year period, and also represented nearly 90 percent of the total 1960 income of these medical-surgical Plans," John W. Castellucci, executive vice president of the national association, stated. At the same time, the Blue Shield Plans devoted less than 10 per cent of their total 1960 income to administrative expenses.

In its report, the national association indicated that Blue Shield payments to the medical profession had increased from nearly \$116,000,000 in 1950 to the 1960 figure of \$731,131,187.

"The impressive increase in payments to the medical profession over the years on behalf of Blue Shield members clearly reflects the ability of these medical-surgical Plans to develop realistic and flexible programs in order to keep pace with the tremendous ad-

vances in our medical care system," Castellucci added. "At the same time," Castellucci concluded, "our Plans have annually expended a lesser percentage of their income dollar to administrative expenses in the face of spiralling inflation and the commensurate cost of doing business."

Enrollment in the nationwide Blue Shield Plans surpassed the 47,000,000 member mark at the end of 1960, the National Association of Blue Shield Plans reported recently. Total membership in the 74 medical-surgical Plans reached 47,084,988 on December 31, 1960, representing an enrollment of one out of every four Americans, and nearly 15 per cent of the total Canadian population.

The national association also reported that four Blue Shield Plans have enrolled more than 60 per cent of the population in the areas they serve. They are the Plans serving the District of Columbia, Rhode Island, Delaware and Rochester, N. Y., areas.

## News

### DR. LUCIUS VARN BEGINS PRACTICE IN BRANCHVILLE

Dr. Lucius Varn has returned to his home town to practice medicine.

Branchville had been without the services of a resident physician for six months until Dr. Varn opened his office here recently. He had done general practice in Orangeburg since 1957 in addition to serving as

director of the Orangeburg County Health Department. He will continue in the latter capacity in his new location.

A native of Branchville, he was graduated from the local high school, Newberry College and the Medical College of South Carolina. He interned at Orangeburg Regional Hospital. He received the Master of Arts Degree in Public Health from the University of North Carolina in June.



Dr. Louis M. Stephens, a 1960 graduate of the Medical College of South Carolina, has received a \$1,000 scholarship toward a general practice residency in Alexandria, Louisiana. The award is one of 20 conferred by Meade-Johnson Drug Company on doctors serving general practice residencies throughout the country.

Dr. Robert S. Watkins of Camden has been appointed a member of the Board of Trustees of the State Sanitarium by Governor Hollings.

Dr. Watkins is the Fifth Congressional District's representative on the Board, and his appointment is for four years.

Dr. O. Norman Evans of Greenville has moved to Seneca to become associated with Dr. Lane Mays and Dr. H. H. Wells in the Medical Clinic.

Dr. Evans interned at Greenville General Hospital. He is a graduate of the Medical College of South Carolina, class of 1959. He is a graduate of Furman University. He served in the Navy during World War II and from 1950-56 he was a Captain in the U. S. Army, serving as a clinical psychologist.

Dr. C. R. F. Baker of Sumter was elected to the presidency of the South Carolina Surgical Society at its meeting May 18-21 at Sea Island, Ga. He succeeds Dr. William Brockington of Greenwood at the helm of the 73-member group.

Dr. M. U. Dantzer of Charleston was elected president of the South Carolina Association of Public Health physicians at a medical section meeting held in conjunction with the 38th annual convention of the South Carolina Public Health Association in Greenville in May.

Dr. Hilla Sheriff of Columbia was elected vice president, and Dr. L. A. Nimmons of Bishopville was named secretary and treasurer.

The new officers also will serve as officers of the medical section of the Public Health Association.

Dr. Sidney A. Garrett, 33, of Pickens, S. C., a general practitioner and surgeon, will join Dr. Morris Dalton of Hartwell, Georgia, in practice in July. Dr. Garrett was graduated from the Medical College of South Carolina in 1955.

### **Colleton County Medical Society**

The Colleton County Medical Society has joined the ranks of county societies accepting the task of organizing and training personnel to make available emergency medical service to the citizens of their community. Medical teams specially trained and highly mobile will soon be formed in Colleton County to provide emergency medical care for disaster victims.

### **Dr. Cuttino Receives LL.D.**

Dr. John Tindal Cuttino, acting president of the

Medical College of South Carolina, was awarded the honorary degree of Doctor of Laws by his alma mater, The College of Charleston, at its 176th annual commencement on May 30. Dr. Cuttino was graduated from the Medical College of South Carolina in 1936 and after an internship at Roper Hospital he went into his chosen field of pathology, first at the South Carolina State Hospital, then at St. Elizabeth's Hospital in Washington, D. C., and after his army service 1941-46, on the teaching staff in the Department of Pathology at Duke. Dr. Cuttino came to the Medical College of South Carolina in July 1950 as associate professor of pathology and acting dean. He was made acting president in 1960-61.

### **Dr. T. G. Goldsmith**

Dr. Thomas G. Goldsmith of Greenville was nominated to succeed himself as treasurer of the Association of American Physicians and Surgeons at one of its best attended Interim Meetings at the House of Delegates in Chicago in April. Nominees will be voted on by the AAPS Assembly which meets in Asheville, North Carolina, on October 12, 13 and 14, 1961.

### **Dr. J. T. Green**

Dr. and Mrs. J. T. Green of Elloree celebrated their golden wedding anniversary recently. Dr. Green was graduated in 1909 from the South Carolina Medical College and two of his classmates, Dr. L. A. Hartzog of Olar and Dr. W. T. Brockman of Greenville, participated in the celebration.

### **Dr. Robert Black**

Dr. Robert Black of Bamberg, together with his fellow townsman B. D. Carter, were featured in a recent article in the *Augusta Chronicle*. Mr. Carter, a lawyer of eighty years, and Dr. Black, now a venerable 79, were described as men who refuse to grow old. Dr. Black was graduated from the Medical College of South Carolina in 1905 and has an extensive medical practice in his home town, where he also operates a drug store. In spite of his years Dr. Black is president of the Bamberg County Bank and the Edisto Building and Loan Association, is active in public affairs, is an active Mason and member of the First Baptist Church, the Lions Club and Men's Garden Club. A few years ago he made a trip around the world and continues to keep young by fishing, hunting and traveling.

### **MEDICAL SOCIETY ENDORSES POISON CONTROL PROGRAM**

The Charleston County Medical Society has endorsed a proposed two-year educational program for the prevention of accidental poisoning of children.

A joint effort of the County Health Department, the pediatric department of the Medical College Hospital and the State Board of Health, the program has been discussed at a series of preliminary meetings.

The United States Public Health Service also is

interested in the program as a pilot project in the field of poisoning prevention.

A spokesman for the planning committee pointed out that 70 per cent of poisonings occur because poisons are available to children and that, in an attempt to reduce this incidence, it is necessary to educate and alert parents to this fact.

Aimed primarily at parents of children five years of age and younger, the educational program will make use of many media.

Aside from newspapers, television and radio, which the committee feels will reach only 10 per cent of the people involved in or concerned with the problem, such methods as addressing PTA and church groups and holding clinics and demonstrations are planned.

The committee plans to lay the groundwork for the two-year project this summer and commence the actual program in September.

### HOSPITAL OBTAINS SUPPLY OF RADIUM FOR TREATMENT

Through the efforts of Dr. T. A. Campbell, Jr., local radiologist, 105 milligrams of radium and the necessary applicators have been obtained by the Cherokee County Memorial Hospital for the treatment of cancer.

Dr. Campbell, who completed his residency in radiology at the Medical College Hospital in Charleston, successfully conducted a drive for funds amounting to \$3,300. He found splendid cooperation among citizens and business firms around the county.

Patients in this county will be able to obtain treatment for certain malignancies which can be benefitted by the use of this type radiation without going out of town. This is another service which the local hospital is offering the public.

### MEDICAL COLLEGE GRADUATES 118

On June 1, degrees were conferred on 118 graduates of the Medical College of South Carolina in commencement ceremonies marking the 137th anniversary of the school.

Dr. John Roderick Heller, president of the Memorial Sloan-Kettering Cancer Center, delivered the main address entitled "Medicine of the Future".

John Tindal Cuttino, acting president of the college, conferred degrees and honors and Dr. Thomas Antley Pitts presented the diplomas.

The Rev. Frank DuBose, pastor of the First Methodist Church of Easley, gave the invocation.

Dr. H. Rawling Pratt-Thomas, dean of the School of Medicine, Dr. Frederick William Kinard, chairman of the committee on graduate studies, Dr. William Allen Prout, dean of the school of pharmacy, and Miss Ruth Chamberlin, dean of the school of nursing, presented candidates for oaths, pledges and degrees.

Candidates for doctor of medicine:

Joel William Allgood, Richard Henry Bendt, Wesley Lamar Betsell, Jr., Maxey Carroll Boineau, William Lester Brannon, Jr., Algie Curry Brown, William

Lucas Burns, Jr., Henry Blakely Burton, Harvey Eugene Butler, Jr., Thomas Raymond Byrd, Sydney Earl Carter, Fountain Stewart Clare, III, John De Vore Compton, Jr., Lollice Bradford Courtney, Joseph Henry Cutchin, Jr., Clarence Sylvester Davis, Jr., James Dickerson Dennis, Carla Frances DuBose, William Eugene Dukes, Julian Baynard Ellis, Jr., Skottowe Bellinger Fishburne, Joseph Francis Flowers, William Henry Granger, Casual Donald Hammond, Alexis Connor Higgins, John Paul Jackson, Jr., Robert Edward Jackson, William Pinckney Kay, Jr., George Epps Lipscomb, James Franklin Martin, Sloan Pruitt Martin, Jr., Julian Lorin Mason, Jr., Bradwell Rustin McAlister, Ann Burgess McIntosh and Edwin McTyeire Meares, Jr.

Also, Hiram Burnard Morgan, Jr., John Robert Morris, Richard Leland Morrison, III, Danielle Villeneuve Mutty, David Wyatt Aiken Neville, Jr., Walter Monroe Newton, Jr., Benjamin Edward Nicholson, George Hancock Nutt, Daniel Rembert Pace, Lucius Crawford Pressley, Jr., Thomas Pinckney Rutledge Rivers, Harold Eugene Ross, John Elliott Rowe, III, Lawton Harris Salley, Jack Monroe Smith, William Knox Stacy, Jr., Alva Lawton Strickland, Edgar Ellis Strong, III, Joseph Taliaferro Taylor, III, Barbara Anne Threatt, Eugene Theodore Tragus, Wiley Herbert Turner, Jr., Richard Edwards Ulmer, Norman Sinkler Walsh, John Logan Ward, William Franklin Ward, Jr., Thomas Baker Warren, Jr., Sidney Henry Westbrook, Jr., Robert Lee Wingate, Jr., Donald Jerome Wright and Margaret Louise Wyatt.

Candidates for doctor of philosophy degrees:

Earl Edward Aldinger, Raymond Leo Henry, Leslie Boush Reynolds, Jr. and Edward Staniforth Otey.

Candidates for Master of Science degrees: James Leonard Butterfield.

Bachelor of Science in Pharmacy degrees were granted:

James Ryeson Carroll, Jr., Gary Stanley Cooper, Charles Michael Finucan, Ronald Edward Kears, Charles Henry Peacock, Richard Fielding Poole, Ned Allen Thomas, Faye Parsons Todd and Deidreich Petermann Von Lehe, Jr.

Graduate Nurse diplomas were awarded:

Sylvia Loy Ammons, Stella Merle Bailey, Dolores Edilene Buford Baldini, Anne Emerson Ballard, Mary Elizabeth Baxley, Jane Elizabeth Beach, Joyce Lillian Blakeney, Eva Wayne Brumfield, Allison DuBose Cantley, Julia Lillian Peebles Causey, Dorothy Marie Chandler, Norma Hazel Clardy, Elizabeth Irene Dority, Doris Evelyn Boiter Duncan, Dorothy Estelle Eadon, Nadine Willena Eldridge, Barbara Ann Elsey, Helen Marguerite Creech Garrett and Laura Jo Grisom.

Also, Carolyn Marcelene Ham, Rebecca Stackhouse Hargrove, Jackie Elizabeth Lavigno, Geraldine Claire Main, Mary Carolyn Martin, Linda Jean Miller, Rita Louise Pink Moore, Nancy Louise Moorer, Rosina Elizabeth Wood McConnell, Ann Legare O'Hear, Carol Anna Parker, Diane Morton Ryan, Katherine Woodfin Wallace Seabrook, Patricia Lee Stogner,



Sandra Louise Stumpf, Paula Claire Trussell, Rebecca Elizabeth Wallace, Helen Elizabeth Williams and Mary Idella Woods.



*The New Research Building at the Medical College is started.*

### MEDICAL COLLEGE BUILDING

Final contracts for the construction of a Research-Clinic Building were signed in June by Dr. Thomas A. Pitts, Chairman of the Board, and Dr. John T. Cuttino, Acting President, of the Medical College of South Carolina. Total construction costs amounted to \$1,168,639 in the contracts with W. C. King & Sons of Sumter, general contractors, and the Otis Elevator Company. Funds were obtained from tuition revenue bonds as approved by the State Budget and Control Board with an equal amount obtained from the Public Health Service through its Hill-Burton and Health Research Facilities agencies.

This eight story Research and Clinic Building will be served by an electrically driven, centrifugal type air-conditioning unit of 140 tons capacity with a distribution system specially designed for medical research conditions. Possible spread of air contamination between different working areas is minimized by forcing fresh, filtered, dehumidified air into each room and exhausting the air through duct systems which empty on the roof. Temperature control operates through thermostats individually adjusted in each room to regulate the flow of chilled or heated water through pipe coil units over which intake air is forced. The same pipe coils carry either chilled or heated water depending on the seasons and the switch-over system is controlled automatically by

temperatures outside the building. Special air exhaust systems operate in areas where there are sterilizers, steam cage washers, radioisotope hoods, autopsy facilities and film processing. In the color film processing tanks, the water is thermostatically regulated within a variance of a half degree. Refrigerated work rooms are on the upper floors.

Some of the latest developments in the use of polyester plastics, stainless steel and low expansion coefficient glass have been incorporated in the plans. Unusual electrical capacity is provided by copper bars rising in a central utility area to all floors, from which heavy wires make 10,000 watts available in each room. Considerable power input of this type is needed because most modern research instruments are electronically operated. Overhead twist lock outlets with heavy electric cords from the ceilings permit movable electric instrumentation in any part of the rooms. An x-ray facility is located on the clinic floor and another on the animal surgery floor. Two rooms are electrically shielded for electro-encephalography recordings. Some of the examining rooms are completely panelled with sound absorbent materials. The laboratory rooms are equipped with 2 systems of electric circuits with multiple outlets and one or more stainless steel sinks with all-purpose utility desks and cabinets. Each floor has an individually adjusted hot water system making for economical and flexible operation. An area has been tentatively designed for the operation of electron microscopy but it has been experience in other similar installations that the necessary low vibration characteristics cannot be fully predicted before the building is completed. The concrete framework of the present building is expected to favor relative freedom from disturbing vibrations. General planning has aimed to give maximal flexibility and functional adaptability to accommodate the variety of equipment which will be moved over from the present crowded areas and which will be later installed for future projects. A conference room and general purpose rooms adjoining the elevator tower can be later expanded into a complete eighth floor, according to design plans.

The building, with a total area of 51,533 square feet, will be set back about 10 feet from the sidewalk on Mill Street and will be connected at the first four floor levels by passageways to the present medical sciences building. Exterior styling is traditional and closely the same as other buildings with which it is connected. According to Dr. R. P. Walton, Chairman of the Building Committee, completion date is set for late 1962.

Currently there are 95 active projects totalling \$1,080,365 from 27 granting agencies. A number of research projects, now in the negotiation stage, are dependent on the availability of working space.

Paul B. Smith of Spartanburg has been elected president of the Student American Medical Association. Paul, a Wofford College graduate, is attending the Medical College of South Carolina.



## RADIO COMMUNICATIONS NETWORK BEING DEVELOPED AT HOSPITAL

A radio network between the Chesterfield County Memorial Hospital and its doctors is being established, Hospital Administrator D. W. McCreight said recently.

A high frequency radio and a 70-foot tower has been installed at the hospital and several local doctors already have radio sets in their cars for quick communication with the hospital.

According to Mr. McCreight, the local hospital may be the only one in the state equipped with radio communications which he described as an "invaluable asset in case of emergency."

The radio transmitter has a 30-mile radius of con-

tact, and Mr. McCreight said that Doctors Perry and Dr. Wiley of Chesterfield have also installed radio equipment.

The network is not yet completed, according to Mr. McCreight, but he predicted that soon all local and most county doctors will have radios in their cars and offices.

"Doctors may radio nurses to check on a patient's condition and nurses will have direct communication with doctors in emergency cases," he said.

The radio equipment at the hospital is valued at around \$2600, but Mr. McCreight said it was bought at a "bargain" price, much less than that amount. Cost of maintenance is contracted at \$10 a month.

Doctors pay for their own sets to join the network.

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# Announcements

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## INSTITUTES FOR PHYSICIANS AND NURSES **CARE OF PREMATURE INFANTS** THE NEW YORK HOSPITAL CORNELL MEDICAL CENTER NEW YORK CITY 1961-62

Sponsored by  
New York State Department of Health  
and  
U. S. Children's Bureau

Institutes for the 1961-62 fiscal year are definitely scheduled to start on the following dates:

September 18, 1961  
November 6, 1961  
January 8, 1962  
March 19, 1962  
May 16, 1962

**EARLY APPLICATION** for these Institutes is **ESSENTIAL**.

The intensive program for physicians is of two weeks' duration and that for nurses is of four weeks' duration (full time). The first two weeks for nurses is given concurrently with the one for physicians.

### *Tuition and Stipends*

Tuition is covered through a special arrangement with the New York Hospital-Cornell Medical Center. A stipend of \$125 is provided to physicians attending the Institute to help cover board and lodgings for the two weeks of the Institute. A stipend of \$175 is provided for nurses attending the Institute to help cover board and lodging for four weeks of the nurse's attendance at the Institute. Travel must be covered by the participant or his sponsoring agency.

### *Eligibility and Selection of Candidate*

Teams of physicians and nurses caring for premature infants or participating in programs for the care of premature infants are eligible for the Institute. *Method of Application*

Applications by physicians should be forwarded (after approval by the health commissioner or the director of Maternal and Child Health of the state in which the candidate works) to:

Dr. Charles H. Bauer, Medical Director  
Institute in the Care of Premature Infants  
Department of Pediatrics  
The New York Hospital  
525 East 68th Street  
New York 21, New York

The physician's letter of application should include:

1. Professional education and experience
2. To which category the candidate belongs
3. A statement of the exact position held

Applications by nurses should be forwarded (after approval by the health commissioner or the director of Maternal and Child Health of the state in which the candidate works) to:

Miss Patricia Cummings, Nursing Director  
Institute in the Care of Premature Infants  
The New York Hospital  
525 East 68th Street  
New York 21, New York

The nurse's letter of application should include:

1. A statement of the training and experience of the applicant
2. The specific, present position of the applicant in the hospital or health department premature care program.
3. Educational preparation
4. Name of the other team applicant

It is desirable to have the applicants of both team members forwarded to the New York Hospital at the same time. Applicants must be filed at least two months before the beginning of each Institute. Final selection of candidates is the responsibility of the New York Hospital-Cornell Medical Center.

**THE TENNESSEE VALLEY MEDICAL  
ASSEMBLY**

sponsored by

The Chattanooga and Hamilton County  
Medical Society, Inc.

cordially invites you to attend its  
9th ANNUAL ASSEMBLY

Read House Chattanooga, Tennessee  
(Intersection of the Golden Gateway)

Monday, September 25, 1961

Tuesday, September 26, 1961

(AAGP members granted eleven hours category one credit for two days' attendance.)

Joseph W. Graves, M. D., 109 Medical Arts Building,  
Chattanooga, Tennessee, Chairman

**A DATE FOR YOUR AUGUST SCHEDULE**

The Eleventh Annual

**POSTGRADUATE OBSTETRIC-  
PEDIATRIC SEMINAR**

The Colonial Inn

St. Petersburg Beach, Florida

August 17-18-19, 1961

National authorities in the fields of obstetrics and pediatrics will present an outstanding program, which will be mailed to you at a later date.

Sponsored by:

Maternal Health Committee

S. C. Medical Association

Division of Maternal and Child Health

S. C. State Board of Health

South Carolina Chapter

American Academy of General Practice

**TRI-STATE MEDICAL ASSOCIATION**

Annual Meeting

Cavalier Hotel

Virginia Beach, Virginia

July 27th-28th

**SECOND ANNUAL SUMMER SYMPOSIUM**

sponsored by

**BLUE RIDGE CHAPTER OF GENERAL PRACTICE**

and

**VIRGINIA ACADEMY OF GENERAL PRACTICE**

SYMPOSIA

Inflammation

Mental Depression

(morning session)

(afternoon session)

Speakers:

Richard W. Payne, M. D.

Norman J. Skversky, M. D.

John J. Calabro, M. D.

Robert Irby, M. D.

Emanuel A. Daneman, M. D.

Else Kris, M. D.

ROANOKE, VIRGINIA

Hotel Roanoke

Saturday, July 22, 1961

# Deaths

## DR. W. S. JUDY

Dr. William S. Judy, 69, died at his home May 18, 1961. He was a retired radiologist.

He was born at St. George, son of the late Dr. Perry M. and Josephine Shuler Judy. He was a graduate of the Medical College of South Carolina, class of 1913. He interned at Roper Hospital and served in World War I, where he studied radiology. He began practice at 21 in St. George with his father and came to Greenville in 1927, practicing until his health failed.

He was a member of Buncombe Street Methodist Church and was chairman of the board. He was a past president of the county medical society and the alumni association of the Medical College. Dr. Judy was a fellow of the American College of Radiology.

## DR. W. T. GIBSON

Dr. W. T. Gibson, 77, physician of Batesburg, died recently at the Barnwell Hospital after an illness of several weeks.

Dr. Gibson was born in Marion County, and finished grade and preparatory school at Davidson, N. C. He was graduated from the University of Maryland in 1909, and was a member of Nu Sigma Nu fraternity and president of the junior class. He interned at the University Hospital in Baltimore, Md.

Dr. Gibson came to Batesburg in 1910, driving a horse and buggy from Columbia. He served his people and his community faithfully and unselfishly for half a century, and delivered between four and five thousand babies. He organized the first football team in Batesburg-Leesville, and coached it for over three years. For many years he was the team's doctor and sat on the bench with the boys. He was a veteran of World War I, and was in command of Base Hospital 109 in Vichy, France.

He was a member of the Ridge Medical Association, the District Medical Association, and an honorary member of the state and American Medical Associations.

## Reduction of Barriers to Licensure of Qualified Physicians in the States

### Resolution Adopted by the American Public Health Association

WHEREAS, the basic provisions of current medical licensure laws were enacted by most states at a time when there were many substandard medical schools, and when such legislation was urgently needed to protect the public against inadequately trained physicians, and

WHEREAS, medical education has improved vastly since the adoption of such licensure laws, and high standards of medical education are now protected and maintained by carefully devised systems of accreditation, and

WHEREAS, the present acute national shortage of well trained physicians is expected to persist and cannot be overcome for at least one or two decades, and many states have insufficient numbers of physicians to meet the needs of their populations, and

WHEREAS, the medical licensure laws of some states are unduly restrictive in light of the advances in medical education, and interpose unwarranted difficulties for communities which need to attract physicians, therefore be it

*Resolved*, that the American Public Health Association recommend to the Council of State Governments that the Council sponsor the establishment of a commission; To study the present state of medical licensing practices; to

consult with the Federation of State Medical Boards of the United States, the Council on Medical Education and Hospitals of the American Medical Association and with other interested professional and academic associations, agencies and institutions; to prepare a model medical licensing law; and to encourage its uniform adoption by the states; so as to protect the public interest and to minimize the barriers to licensure of qualified physicians in the several states.

## Ophthalmology and Optometry— What Is The Issue?

Medicine shares with optometry that portion of the field of medicine which deals with refraction without the use of drugs. Optometry is not a medical service. The optometrist does not participate in the medical care of patients. Although he is not qualified to decide that a physician's services are not required, he may sometimes realize that the person who comes to him for refraction needs services only a physician can give. We believe most optometrists adhere to the concept that their function is refraction and the correction of refractive errors by glasses—a concept which is in agreement with the expressed views of the medical profession. Optometrists have earned a measure of respect from ophthalmologists in refraction.

In noncycloplegic refraction optometry has adopted a part of medicine's refractive procedures. Nevertheless, the medical profession has declared voluntary



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professional association with the optometrist unethical, that is, contrary to the interest of the patient. Why?

The medical profession has an obligation to clarify this matter in the public mind. The opinion of the medical profession will be the more respected if it is supported with a frank authoritative statement of the issue.

For some years optometry has sponsored legislation and court actions which have brought it into conflict with medicine. Legislative extension of optometry to make it, in effect, ophthalmology-without-surgery-and-drugs (or in some instances, ophthalmology-without-surgery) represents an evasion of the medical practice act which threatens the public interest. By law, optometry now exercises jurisdiction over one ancillary medical worker, the optician, in several states. Legislation has been proposed repeatedly that would threaten the ancillary worker in the physician's office by the device of defining optometry in terms that could be used to accuse supporting medical personnel of "practicing optometry."

Those who are charged with responding to these situations at the state level deserve and require full information of the experience of other states and of the implications of what confronts them.

It is important that all recognize that, although ophthalmologists in the care of their patients are most often confronted with the problem of optometry, the conflict is with medicine. It is medicine that must meet the issue. Those physicians engaged in ophthalmology have a duty to make available to the profession as a whole their knowledge born of experience. It is their privilege and duty to communicate facts to the state society and American Medical Association delegates and to utilize proper forms so that a broadly based expression may be available for the guidance of medicine's official bodies which determine policy and official position. In the American Medical Association the forum is the Section on Ophthalmology; the policy-making body is the House of Delegates.

Those whose official duty it is to inquire into these matters should make known their findings. If there is to be resolution of the apparently divergent views, it must be frankly acknowledged that disagreement exists, and its nature must be clearly and dispassionately defined. Medicine owes this to itself, to optometry, to the people. Clarification is absolutely essential.

From an Editorial by Derrick Vail  
*J.A.M.A.*, 159:927.

### SEAT BELTS

The recent agreement by automobile manufacturers to provide built-in attachment points for seat belts in 1962 cars is a welcome step in auto safety, in that it will provide a strong impetus to public acceptance of

seat belts. This achievement can be credited to the persuasive efforts of the U. S. Public Health Service, the American Medical Association, the National Safety Council, the American College of Surgeons, several state legislatures, and other organizations and individuals concerned with traffic safety.

Despite the appropriateness of welcoming this development, Consumers Union believes that there is a possibility that it may backfire and eventually damage the cause of seat belts and of other safety measures. In order to avoid this contingency, it behooves the proponents of seat belts to take a sober look ahead, to recognize and pass along to the public some realistic perspectives on the matter. These include:

(1) The benefits to be derived from the installation of belt attachment points are entirely dependent on the public's cooperation in buying and using seat belts.

(2) The scientifically established facts about the effect of seat belts in controlling death and injury are these: belt users are just as likely to be hurt in accidents as non-users of belts, but belt users are likely to sustain injuries of a less severe nature; in comparable accidents, belt users experience about 35% fewer serious injuries than non-users; aside from "off-the-cuff" opinions and the judgments of clinical observers, there are no conclusive data with respect to fatalities — but carefully qualified predictions based on large-scale studies suggest a reduction in fatalities of 25% to 50%.

(3) Even though the *individual* using a seat belt can reduce his own risk of severe injury by about 35% and might reduce his own risk of death by anywhere from 25 to 50%, the *national* highway fatality toll would reflect this much reduction *only if all* cars, old and new, have seat belts for *all* passengers, and the belts are used.

(4) It follows that even if all 1962 cars (but only 1962 cars) were to be equipped by their owners with belts for the anchors provided, and if 1962 cars were to be 10% of the cars on the road in 1962, the overall reduction of severe injuries could be no more than 3.5% (10% of 35%) and the overall reduction of deaths would be likely to be no more than about 2.5 to 5.0% (10% of 25%, 50%).

Clearly, then, under the most favorable conditions, we cannot expect even as much as a 5% improvement in the overall picture from the seat belt attachment points in the 1962 cars.

The public, however, has been blithely led to expect (by recent newspaper reports) that the seat belt anchors will lead to a reduction of injuries and/or deaths by as much as 50% or 60%. We therefore must consider the possibility that widespread disillusionment with seat belts may result in 1963, if the touted 50% or 60% turns out to be in the order of 3 to 5%. Public acceptance of seat belts, and of other safety measures, may thereby receive a body blow.

# The Journal

of the

## South Carolina Medical Association

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NUMBER 8

### RECENT ADVANCES IN NUTRITION

DR. JOHN YOUMANS,

*Director, Scientific Activities, American Medical Association*

In recent years interest in nutrition has grown and there has been a shift in the direction of that interest. Traditional nutrition considerations are still the main concern of the nutritionists, physicians, dieticians, and public health agencies. In some areas the main concern is centered on deficiencies in calories, which is starvation if carried far enough. Deficiencies in protein are still common around the world. With our greater knowledge of the vitamins and our ability to synthesize the vitamins in pure form they are becoming less of a public health problem than during the period when they were being discovered and identified with functions and disease.

Our interest in total proteins was followed by interest in the deficiencies in the specific amino acids. Studies of deficiencies of minerals needed in large amounts, such as sodium chloride, were followed by studies of the minerals needed in trace amounts. Deficiencies still have a place in medical practice and in public health nutrition, but the concern of physicians and nutritionists has turned to the problems of overnutrition, overeating, metabolism, and the relation of nutrition to infection, morbidity and mortality.

The interest in metabolism is because these studies gave us a clearer insight into the intimate metabolism. They forward our knowledge of causes and mechanisms. The interest in the relation of nutrition to infectious disease

comes from a fear of sickness and a recognition of the need to know why people contract certain diseases.

Deficiencies of ascorbic acid in infants occur with disturbing frequency and are missed by observing physicians with equally disturbing frequency. I do not refer to the obvious forms of scurvy but to the incomplete forms. A gradual increase in the incidence of vitamin C deficiencies in recent years is reported from such clinics as Vanderbilt where the seriousness of this situation is emphasized. This incidence of ascorbic acid deficiencies is paradoxical in that it occurs in general in a time of generally superior nutrition. Part of the cause for this is the generally improved diets of infants which result in a more rapid rate of growth which in turn requires a relatively larger amount of the vitamin. There is a general tendency to overestimate or underestimate the need for vitamin C in infants. Careless administration and other factors are responsible for these recurring cases of mild infant vitamin C deficiencies. Overnutrition tips the scales and produces clinical symptoms unless all nutrients are present in adequate amounts.

The same thing is true with the adult and especially with regard to wound healing. For a long while we have been uncertain as to the role of ascorbic acid in wound healing. Recently we have come to a clearer understanding of the role which vitamin C plays in the production of connective tissue. It has now been clearly demonstrated and there is no longer any reason to doubt its influence. If we

From an address delivered to the S. C. State Nutrition Committee meeting Charleston, South Carolina, January 24, 1961.



do not see it more often in the general population it is because of the general good nutrition of the population of this country at this time. Still it remains a factor to be considered in situations of trauma both surgical and otherwise.

The situation regarding rickets and vitamin D is the same as with vitamin C. Despite the current practice of prophylactic administration of vitamin D in direct form in infancy and the form of D in milk later in childhood this spread between requirements due to a greater rate of growth and the current allowances is narrow. There is a very real possibility of early rickets. This early and mild form of rickets is not detectable unless one goes to some length to detect it. I would like to warn that such a danger should not lead to over-dosage of vitamin D, which is relatively easy. I cited vitamins C and D because the general increased rate of growth caused by over-nutrition increases the demand for these nutrients.

Excess nutrition is becoming a more important nutritional problem than nutritional deficiency disease in this country. There can be no doubt that the American public is vitamin conscious. I think most of you know that leaders have seen fit to call attention to excessive use of vitamins by the public. Some physicians condemn the use of so-called supplementary additional vitamins as a prophylactic measure. In addition to the money value of the vitamins consumed by the public, which is frequently a waste, there is a danger of not detecting a serious health condition by this self-medication. There are certain nutritional aspects which require a physician's attention. I have referred to the excess intake of certain nutrients calling for a greater intake of other nutrients. There are possible dangers of the excessive intake of vitamins.

Vitamin manufacturers like to put out a pill which contains a balance of vitamins and minerals which represents as far as we know the relative proportions we should consume of those nutrients. However, we do not know as yet all about nutrition and there is no certainty that these are all the nutrients man needs or that the proportion of those given is correct; mankind is too irregular in his habits and is

too irregular in his eating to be sure that a balance would always be maintained. It is not established that the present recommended allowances nor the generally accepted requirements are in balance one with the other. We think they are, but we are not sure of it. Requirements are determined largely on the basis of what is needed to prevent a deficiency. With animals we have a fair idea as to the balance needed in the nutrient intake. Because of the limitations of experimentation with humans we have had to take it more on the basis of what we need of nutrients to protect against a deficiency. There is no assurance that these are optimum. There is some reason to believe that they are more than optimum. What has been said about vitamins is equally true for the individual amino acids. We know that excesses of single amino acids require additional amounts of other amino acids for most efficient utilization. It is possible to disturb this balance if we introduce supplementary nutrients. Adding amino acids to some of our foods and feeds to improve protein, the quality of some protein, or to compensate for alleged deficiencies, is a commercial practice.

Following the publication of an article in the JAMA on the dose of vitamins, we had a reaction from the vitamin industry and a full page advertisement appeared giving all of the reasons why one should take supplementary vitamins. Taken literally the claims are correct. For example, "vitamins play a vital part in changing the food you eat into muscle, bone, etc." There is nothing wrong with that statement. It is true. It is the implications drawn from these sorts of statements which mislead the public. I think some vitamin distributors are honestly convinced that the American public needs a vitamin pill every day in order to maintain their nutrition, contrary to which we are just as convinced that it is not necessary. I think that is one of the areas in which people such as you here today can contribute very greatly.

Fortunately for most, if not all of the water soluble vitamins, it is almost impossible to cause poisoning due to consuming more than the body needs. You get minor temporary symptoms from excessive intakes of nicotinic

acid. Urinary excretion clears the body of the amounts of vitamins in excess of what is needed. A certain limited store of reserve remains. There is little or no cumulative effect. The same situation does not exist with the fat soluble vitamins, particularly vitamins A and D. Toxic effects occur when excessive amounts are given to infants. The general idea seems to be that if some is good, more is better, which is a very poor doctrine in medicine or nutrition.

I want to point out that in setting the blame for the unnecessary consumption of vitamins that physicians must be responsible for a large share of it. I am sorry to say that, but that is true. Failure to make correct diagnosis is one reason. Shotgun and excessive prescription writing is another. The thought that if it doesn't help at least it won't hurt is still another reason. Some follow the practice of using vitamins for all health purposes. The use of placebo (pill of sugar or inert material) is justified provided the physician is not misleading or deluding himself because the placebo is used without the patient's understanding for psychological reasons. The use of a vitamin as a placebo with the physician thinking that it may after all be helpful—at least it doesn't do any harm, is bad. It excuses him from a careful and clinical study of his patient and the necessity to face up to the fact as to whether the patient does actually need a vitamin.

The most common form of overnutrition and perhaps the most common nutritional disease is overweight. Not all of it is obesity. Even mild degrees of overweight are significant. It has been shown by studies of body consumption that with advancing years the proportion of fat in the body increases even though the total weight remains nearly the same. It has been shown recently that we know very little about the relative composition of the body and we are using tables which are outdated. Through radio-active potassium, heavy water, and other isotopes we have learned to separate the metabolically active tissue from that non-metabolically active tissue. One could classify human beings on the basis of body composition rather than simply total weight or height. Body type influences

such things as basal metabolism and the relative need for nutrients. Your body type is determined by the proportion of metabolically active tissue compared to the amount of metabolically inactive tissue. That is the basis for classification of overweight.

We are all familiar with the deleterious effects of obesity on heart disease and diabetes. The relation of overweight to arteriosclerosis and the statistical relationship between arteriosclerosis and calorie consumption is evident on a worldwide scale. The study of the nutrition of populations is helpful in defining the significance of weight for an individual. Countries with a lower calorie intake not only show a lower average weight per age sex but also a lessened incidence of arteriosclerosis. These findings raise questions as to the calorie needs of patients if desirable weights are taken as criteria. The findings of certain surveys have raised questions regarding the ability to perform physical work on low calorie intakes. It seems that a much lower calorie intake should be set for standards conducive to better health. It would seem that the levels of 2800 to 3000 calories set for the ordinary person may be too high for what he should have if he should have the most desirable weight.

Any discussion of calories in relation to body weight brings up the question of unit meals as represented by Metracal. As you probably know, the AMA recently issued a warning against such dietary preparations. Actually there is nothing theoretically wrong with such preparations provided that the formula is satisfactory and the contents conform to the formula. They should provide adequate nutrition for limited periods except for a deficit in calories. I say limited periods because it may be that over long periods theoretically adequate diets could actually be deficient in some unknown element. However, the practical objection to the use of such unit intakes lies in the self-use without medical supervision. Treatment or management of overweight or obesity should be under the direction of a physician.

Fat contributes more than twice as many calories as carbohydrate or protein, and hence it is the largest factor in determining caloric

intake. The contribution of fat to caloric intake in this country averages around 50%, about 40% in Europe and about 25% in undeveloped countries in the Near, Middle and Far East. The corresponding figures for the incidence of obesity or overweight, cholesterol blood levels and incidence of arteriosclerosis are directly proportional. On a basis of population studies we can get some idea of the significance of these matters for the individual. At the present time the greatest interest centers around the effect of saturated and the unsaturated fatty acids. The bulk of the evidence holds that saturated fats have a greater effect than unsaturated fats on increasing the blood level of cholesterol. The important thing is "What is its significance?" So I prefer to put the emphasis on total caloric intake and let the fat more or less take care of itself.

For centuries most of the concern of nutritionists and populations has been of undernutrition. In the beginning it was simply a lack of calories—starvation. At the present time we have very little actually overt nutritional disease or deficiency disease in this country. I have mentioned some. Our knowledge of the relation of nutrition to other aspects of health and life has begun to emerge. Among these are the process of aging, and the phenomenon of longevity. I think anyone would agree that adequate nutrition is a factor favoring a longer healthier life. Certainly this would be true of death from gross deficiencies. However it has been difficult to determine the effect of nutrition in the presence of other factors affecting longevity and infectious diseases. The life span so dramatically increased in recent years has been mainly the result of control of infectious disease. In other words, there is no assurance that we are going to live any longer at all. It is only because fewer of your associates have died in younger years that the life span is increased. This removal of the burden of death from infectious disease has made it possible to get a somewhat clearer view of the possible effects of nutrition on the aging process and longevity. What determines the natural life span of an individual? It is determined in part by heredity. However, within the framework of heredity can it be affected by environment,

and in this case can it be affected by nutrition? If so, what is the mechanism concerned, and how is it affected by nutrition? Almost everyone would say that better nutrition would result in a longer life, but I am not sure that that is the case.

A number of years ago Dr. McKay showed that if rats are underfed they live longer. That has been confirmed. It has been shown that rats which are underfed live longer and are less subject to rat diseases than rats which are well fed in the growth period. This applies more to male rats than it does to female rats.

There is also evidence that lean small people have a longer life span than large heavy people. There is some evidence that stunted trees, that is trees which have been malnourished or undernourished during growth, have a longer life than those which are well nourished. This has been shown by certain pine trees on the Pacific Coast.

Malnutrition or undernutrition results in a postponed maturation. This was observed in studies at the beginning of the second World War in Spain and in France in which we found delays in Spanish and French children as long as a year compared to the "normally" fed children. We are all familiar with the changes in the growth rate of children in this country under the environmental conditions of recent decades. It is common knowledge that boys are larger than their fathers. As a matter of fact their fathers were larger than their grandfathers. The first generation following immigrants from other countries is almost always larger than its parents. I don't know why, but it is impossible to assign these changes to nutrition alone. On the other hand, it is unlikely that such things as lessened existence of infectious diseases is alone responsible. The feeding practices of the present day and the increase in growth rate form an environment which might be linked to the increase in incidence of degenerative diseases. I prefer to direct attention to the possible relation between simple accelerated growth based on general overnutrition rather than to specific variations in nutrition related to the amount or degree of unsaturation of the fats consumed.

If increased longevity is the object, should



there be an optimum rate of growth and an optimum adult size which is controlled by the level of nutrition? Both might be less than they are at the present time—nutrition might be at a lower level. What is the object of nutrition other than simply keeping alive? With beef cattle, sheep and swine the object is to make them grow fast and large, and then kill them. The object of nutrition in dairying is to turn the cow into a factory and to get out as much milk as you can and then kill the cow. We nourish race horses to make them efficient physically so perhaps the relation of nutrition in the horse is closer to the objective of nutrition of man than for other animals. At

any rate the fact is clear that we do not nourish people for the same reasons that we nourish animals. I suppose the objective is to enable man to live the longest, happiest, and healthiest life possible. If that is the objective, are we going ahead in the right way? If that is the objective, should we give consideration to limiting the rate of growth and the size of human beings? If there is to be a limit put on the rate of growth and size of the individual, who is going to do it? I don't like to raise the specter of the authoritarian state and half starving populations in order to let them live longer, but I suppose such a possibility exists.

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## TAKING STOCK OF SOUTH CAROLINA'S FOOD

### A PANEL DISCUSSION

Hilla Sheriff, M. D., Moderator, Director

Division of Maternal and Child Health  
South Carolina State Board of Health

Vince Moseley, M. D.  
Dean of Clinical Medicine  
Medical College of South Carolina

Faith Clark, Ph.D., Director  
Household Economics Research Division  
Agricultural Research Service  
U. S. Department of Agriculture

Eleanor Townsend, M. D., Director  
Laboratory  
South Carolina State Board of Health

T. L. Scen, Ph.D., Head  
Department of Horticulture  
Clemson College

R. F. Wheeler, Ph.D., Head  
Animal Husbandry Department  
Clemson College

C. W. Harrell, Assistant Director  
Division of Sanitary Engineering  
South Carolina State Board of Health

**T**he panel was opened by Dr. Hilla Sheriff, moderator. She suggested that we consider South Carolina's problems and take stock of our food situation today. Also, what are our people eating and whether we will have enough to eat for the expanding population?

*Dr. Sheriff:* What are production problems of meat? What consideration is being given to the production of animals with a modified fat content?

*Dr. Wheeler:* Regarding beef, cattle, swine and sheep, much is being done in trying to produce a leaner type animal. We select and

breed animals of leaner nature. Much progress is being made in South Carolina, particularly in getting rid of surplus fat in swine. We eliminate fatty type animals and do not permit further breeding. Similar work is being done with beef. We control the length of time of lot feeding beef and slaughter the animals at the proper time.

As to supply, we do not produce as much meat in South Carolina as we consume. This is particularly true of beef. We produce and consume very little lamb. We eat more pork than we produce and we ship out animals for fattening. We have no anxiety about producing enough for the increasing population. There has been one pound per person per year

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increased consumption of meat since 1930. There has been 3 to 4% increase in the number of cattle. We need one-half million more steers in 1961 than in 1960. The same is true of swine. There will be no problem during our life time in meeting the increased needs. It takes more feed to produce fatty type animals. But now the emphasis is on the production of lean meat and there is a more efficient job of production. With better care and breeding there is an increase in the number of offspring per animal. We could divert grain from the production of whiskey to animal feed.

*Dr. Sheriff:* What problems of protection do we have in getting meat to the consumer in a safe condition?

*Mr. Harrell:* The Division of Sanitary Engineering is responsible for the safety of food. The early regulations were adapted to conditions of 30 years ago. The regulations have been revised to meet the changing conditions. As Dr. Clark mentioned, much of our food is being moved away from the home.

The regulations apply to the abattoir, wholesale and retail establishments.

*Dr. Sheriff:* We hear much about giving antibiotics to cows. Do we need have fears about such conditions?

*Dr. Townsend:* Pasteurized samples of milk are brought to the State laboratory to be examined for contaminants, including antibiotics.

Raw samples are also tested upon request. (Raw samples are tested by dairies.) The methods of testing are standard and their techniques are coordinated by the Cincinnati Center of Laboratories.

People in the United States can be assured of uniform testing. Samples are distributed to other laboratories in the state for checking.

*Dr. Sheriff:* How do you feel about foods, other than meat? In what condition do they reach us?

*Dr. Seen:* People often think of horticulture only as applied to ornamental plants, but the Clemson Department also works with fruits and vegetables for the fruit and vegetable industry.

We set goals for the improvement of fruits and vegetables. We have had a fresh fruit market industry in Beaufort and Charleston.

This market in recent years has gone down and down. The trend is that the housewife is interested in preserved products. We are now gearing aims to food preservation. Some varieties are not suitable for processing and new aims are to develop suitable varieties. The peach industry in South Carolina is the second greatest as to number of trees in the United States. In the past we have shipped nearly all peaches in fresh state, but now we are interested in canning and freezing locally. Studies are being made of the post-harvest condition and shelf life.

*Dr. Sheriff:* How many processing plants do we have in South Carolina?

*Mr. Harrell:* Roughly 500, counting bakeries, confectionaries, abattoirs and others. There are good regulations concerning these establishments. County health departments make inspections. Assistance is given to local health departments by specialists from the State Board of Health. Great strides have been made in the last 10 years. We need to be on our toes to cope with increasing problems.

*Dr. Sheriff:* Does the feed that animals eat have anything to do with the kind of fat or the color of fat?

*Dr. Wheeler:* There is some correlation between the feed and the fat. If a hog is given a diet high in fat, the animal is not able to convert all of this fat into a variety characteristic of his species. If fat is given at a low level, it will be deposited in the animal in a state characteristic of his own body fat. High carbohydrate is also metabolized into a fat characteristic of the animal's fat. Fat fed at a high level retains its own characteristics rather than that of the animal to which it is fed; specifically if you feed a quantity of peanuts to hogs you can expect the fat to be soft.

Firm fat results from a high carbohydrate diet.

In the case of beef, forage, grasses and clover produced a softer fat than that from dry feed. This was measured objectively by the iodine number. We hope to identify specific fatty acids which come from different feeds.

Animals that subsist largely on forage have a fat that is normally yellow. Fat soluble color of forage is deposited in the animal tissue.

The highest bred animal will deposit fat with the color of the forage. But we need to take another look at the problem. Most of us associate yellow fat with an inferior product. That is not necessarily so. After the animal has had large amounts of carotene and is then put in a dry lot for only a short while, the pigment may not be entirely removed. If cattle are fed entirely by grazing, the fat will be softer and more yellow. Conversely, if steers are fed on white corn there will be firm white fat and there may also be a vitamin A deficiency in the animal.

*Dr. Sheriff:* Please tell us how to get publications?

*Dr. Clark:* The following are free from the U. S. Department of Agriculture:

Food and Your Weight

Food for Fitness—424—(Home and Garden Publication)

Tables of Nutritive Value—72—(Home and Garden Publication)

The 1959 Year Book of Food contains a wealth of information on food and nutrition, especially human nutrition. It also provides information on economy and safety of food. It has outsold all other year books of agriculture. Of course there is a wider audience than if this were a narrower subject.

*Dr. Sheriff:* Since I'm particularly interested in children, I was concerned upon hearing that there are areas in South Carolina where Strontium 90 is appearing in milk, probably to the point of being dangerous over a long period of time. Is there any danger in South Carolina of Strontium 90 being on grass, and cows grazing, then the Strontium 90 getting into milk?

*Mr. Harrell:* I am not completely qualified to answer the question. Strontium 90, like calcium, can get into the bone structure. Cows grazing on grass where there is Strontium 90 will produce milk containing Strontium 90. The half life of this element is about 20 years. The Atomic Energy Commission does a great deal of testing over the United States for this sort of thing. Testing has been done on vegetables and milk.

The exact picture on milk I do not know, but we can feel certain that the Strontium 90 is below the danger point or else the Atomic

Energy Commission would have advised that it be taken off the market. As long as we get milk from approved dairies, we can be assured that it is below danger point.

*Dr. Sheriff:* That gives me comfort to know that it is being watched.

*Dr. Sheriff:* I'm concerned about our shell fish and other sea foods. How do we know that they are not getting a great deal of radiation?

*Mr. Harrell:* Much testing is being done and reports are sent to the State Board of Health. Amounts of radiation are below the levels of danger and the products safe for human consumption.

*Dr. Sheriff:* Should there be concern about the use of insecticides and sprays? How do we know that some farmers have not been extravagant in the use of sprays, and if so, would that be of danger to us?

*Dr. Seen:* Since the cranberry episode, the Department of Health, Education and Welfare and other agencies are watchful of products which are used in spraying. There is a terrific screening process. In the past there was a chance of danger, but now the products are carefully tested and there is not much danger even if the farmer does overspray. We have faith in the different Bureaus involved in this. We get involved in experimental chemicals. There are regulations concerning labeling of insecticides and we can't use some even experimentally until they are labelled.

*Dr. Sheriff:* We eat a quantity of green vegetables. Does washing of them make them safe if they have been sprayed?

*Dr. Seen:* There are all types of sprays and we do give definite instructions as to time of application. This is particularly important with leafy vegetables. There are some sprays which are not recommended for fear that the grower might not follow instructions regarding application prior to harvest. We refrain from recommending such products.

*Dr. Sheriff:* We are concerned about children who live in homes where insecticides are used and the danger of these products to children. There was a sad case of a nurseryman who put an insecticide in a Coca-Cola bottle and a three year old drank it. The child was dead upon arrival at the hospital. Such accidents happen more frequently than we like. The



South Carolina State Board of Health does have an accident prevention program, and in connection with it we have two Poison Control Centers in the state, one is here in Charleston and the other in Columbia. The Poison Control Centers give information to doctors or hospitals regarding treatment as well as providing treatment to patients brought in. Physicians at a distance may call the centers to find out specific treatment for poisons which may have been ingested. All physicians have been given laminated cards with the unlisted telephonic numbers of the centers. There are 250,000 known household products which are poisonous if ingested in quantity and that is in addition to aspirin and various other drugs. The pesticides that are carelessly kept are another hazard to children, especially in the developmental stage where everything goes from hand to mouth.

*Dr. Sheriff:* There is much talk about eggs, particularly cooked or raw. How worried should we be about salmonella in eggs and should we eat soft cooked eggs?

*Dr. Townsend:* That is a hard question because of different opinions and different eggs. (We are not speaking of salmonella typhoid or para-typhoid type.) These organisms are capable of producing disease, but seldom do. The danger depends upon how many organisms there are in with food. A small infection may produce no illness or no recognizable illness. Cooking will kill the organisms. The less pathogenic may be carried on egg shells. The answer to this is to wash eggs. Food can be contaminated by people handling food. It seems to be well established that a temperature of 170° will kill salmonella. If a large mass of food is cooked, it should be handled so that the temperature affects all parts of food.

*Dr. Sheriff:* You gave a hopeful note that fewer people are having an inadequate diet. Will this hold true if prices continue to spiral?

*Dr. Clark:* The economists can't look too far into the future. The estimate at the last outlook conference was that prices would not be up much, if any, on the average for year 1961 over 1960. On the whole, food prices have not risen as much as prices of other commodities. The great rise has been in services, including

medical care. These have gone up faster than clothing and food. On a national per capita basis, the amount spent for food in this country is about one-fourth of the national expenditure. This is about the same proportion as of 20 or 30 years ago, but we do get for our money a much more varied assortment of food. We get more meat, milk and processed foods. Actually, if we bought the same type food as formerly with the same degree of processing, we would get a much greater quantity of food. Relative to earlier years and relative to other countries, food is a good bargain in the United States. The economists frequently compute costs in terms of hours of work performed in order to buy a specific commodity. It is much fewer hours in this country than in Russia.

*Dr. Sheriff:* How much meat is in a processed chicken pie? How much protein do we get in a prepared "store bought" chicken pie?

*Dr. Wheeler:* We don't know exactly.

*Dr. Clark:* We do have standards of identity for some processed foods, but standards have not been developed for all items. Even though there appears to be a small amount of chicken in such a product, we can also remember that no bone is included.

The Department of Agriculture is making a study of the cost of processed food. Some convenience foods may be less expensive than the food in the natural state. For instance, the cost of processing may be offset by the cost of transportation. Concentrated frozen orange juice may be cheaper than the fresh product because of reduced cost of transportation.

*Dr. Wheeler:* There is some confusion regarding federal grading and federal inspection. Federal inspection means when an animal was killed there were ante-mortem and post-mortem inspections. In each plant there is a qualified Doctor of Veterinary Medicine who is responsible for inspecting the meat and meat products. The round stamp means U. S. federal inspected and the number in the circle shows the number of the plant and the inspector. There is a rigid control. The stamp means that the meat is safe, but it has nothing to do with the quality of meat. The carcasses of old animals are used in processed products, such as sausage, wieners, etc.

There are seven federally inspected plants

in South Carolina. To go through inter-state commerce or foreign trade the meat must be federally inspected. Grading refers to the quality of meat. Inspection is under the Agricultural Research Service and grading is under the Agricultural Marketing Service.

No meat has to be graded except under emergency conditions. U. S. Prime, Choice, U. S. Good, U. S. Standard, Commercial, Cutter or Canner are the grades. Age of carcass, ossification of bone, fat, color, texture and firmness determine grade. The higher the quality, the lower percentage protein. If thinking in terms of nutrition, do not choose prime quality. Prime is expensive to produce because the fat is 15% water and the lean is about 70% water. Of course, there is a higher caloric value in the prime.

A meat plant does not have to have federal inspection in order to have federal grading.

Probably products going into frozen meat pies are not of high quality, but the meat is high in nutritive value and there is no bone.

*Dr. Sheriff:* We want to know now whether our people are eating these good foods and what clinical manifestation you see? You see patients not only from this area, but from the entire state. Do they eat too little or too much?

*Dr. Moseley:* Certainly we do not see overt nutrition deficiencies in any broad segment of the population. There are certain pockets of poverty which show subtle deficiencies. Some people are not able to work to full capacity because of association of anemia, signs of calcium deficiency as related to osteoporosis, and protein deficiency associated with this. These are the types of things we see rather than overt deficiencies. There are a few clinical deficiencies. Occasionally we see a vitamin A deficiency among older people. I believe we see more of this now than we did a few years ago. I wonder if this may be due to overstressing the fat in eggs and milk and other foods, sweet potatoes and greens not being as popular as formerly.

Dryness of eyes and mouth, I believe, indicate a deficiency of vitamin A and carotene. Vitamin C deficiency we see in older people fairly frequently, with increased capillary permeability, bleeding about the gums and manifestation of this sort. The pediatricians

tell me that vitamin C deficiency is seen more frequently than a few years ago. Perhaps people are using the prepared formulas more frequently, rather than milk plus orange juice. I believe we are seeing more overt rickets than formerly, and this is a little bit puzzling. Maybe we are not paying enough attention to sunshine or depending too much upon minimal requirements, rather than the need to increase vitamin D under certain conditions of stress. These are areas, medically speaking, that need to be reviewed. I feel a little bit that medical faddism may do some harm in stressing and overstressing the dangers of saturated fat and the need for unsaturated fat. No doubt there are certain individuals where rigidity of diet, control of diet, and prescription of diet control of unsaturated fats may be definitely indicated as in instances of damaged lipid metabolism. Then as was pointed out by Dr. Youmans, most people in middle years and elderly people can control this condition by uniform weight reduction and achieve the benefit that is necessary, rather than to completely stop eating eggs, butter, and dairy products, except skim milk.

The extreme practice of eliminating eggs and dairy products, except nonfat milk, by large segments of the population may be a dangerous procedure.

The magazines that are popularizing peculiar diets and stressing only bits of medical information may cause some difficulty which we do not now see and recognize, as we do not know all the facts about nutrition and the relationships and inter-relationships of proteins, fats and other nutrition. For we need to consider, as brought out by Dr. Wheeler, not only what sorts of fats are consumed, but what other foods there are in the diet. We know we need a certain amount of unsaturated fat: what is optimum? We have some estimate that perhaps one-third of fats were linoleic acid and we would be provided the other parts if the diet were balanced too. This is one of the troubles when we get into artificial foods and faddist diets, rather than using natural foods in restricting calories, rather than restricting certain segments of it. We may get into imbalances and may not know all the answers. We have certain hints

of what these imbalances can do. We need certain protective substances, such as alpha tocopherol, choline, even though the diet may take certain unsaturated fats the body metabolism changes. There are many questions that need to be explored.

There is another thing which is distressing. Certain companies have introduced physiological agents which may alter the blood level of cholesterol and this may be very good in prescribed instances. At the same time an altered form of cholesterol is being formed (with a slightly different chemical formula). We do not know what the end result of a large concentration of the varying cholesterol molecule may be. The drugs may be very useful when prescribed for a specific length of time for a specific purpose. These drugs are

still in the experimental process but for uniform agents there is a great deal of danger. Secondly, some of these products on the market which stress lowering blood cholesterol are really variants of the female sex hormone. This may have certain effects over a long period of time, which may not be entirely desirable.

Generally over the state, we are enjoying good nutrition. There are certain types in whom we see nutritional deficiencies, but by and large the adolescent and young adult population are eating better than they have in years. I think we may run into nutritional problems in the near future of an artificial sort, which may have a stubbornness about them and what the end result may be we do not know.

## FOOD IN OUR LIVES

HAZEL K. STIEBELING, Ph.D.

*Director, Institute of Home Economics  
U. S. Department of Agriculture  
Washington, D. C.*

I am especially interested to be in South Carolina. My first assignment in the U. S. Department of Agriculture was to analyze and interpret data collected by the U. S. Bureau of Home Economics in cooperation with the South Carolina Extension Service and the South Carolina Public Health Service, on the food supply of a group of farm families in relation to the incidence of pellagra. Two findings of this early study have always stood out in my thinking:

(1) The first was the importance of "the little more." The study we made demonstrated that the incidence of pellagra and other indications of poor nutrition could be greatly reduced by adding a little more of certain foods to diets of farm families—those farm families who otherwise subsisted in winter and early spring on a very monotonous diet, with

85 to 95 percent of the calories coming from refined grain products, sugar, and fat. Important additions proved to be milk in various forms, wheat germ, lean meat, or dry yeast. Farm families free from pellagra during the periods of our study had about a quarter of a pound of lean meat, poultry, or fish a person a day, and also the equivalent of about a pint of milk a person a day. Those succumbing to pellagra customarily used no milk and only about one-tenth pound of lean meat a person a day. Otherwise, the diets of the two groups were virtually the same.

(2) The second finding—new to me then but long well recognized by Extension workers—was the nutritional importance to rural families of home food production for household use—home production of milk, pork, eggs, and garden truck, including winter gardens. Most of the South Carolina farm families who escaped pellagra had a cow for milk—families without cows seldom used milk and were very prone to poor health.

Paper presented by Faith Clark, Ph. D., January 25, 1961, at the Nutrition Institute sponsored by the South Carolina State Nutrition Committee and the Medical College of South Carolina, at Charleston, January 24-25, 1961.



This principle of a wisely planned program of home food production for household use has been emphasized over and over, and is of as great importance to many rural families today as it was a generation ago.

South Carolina has studied dietary patterns and nutrition problems of its people more closely than have many States. She was among the first of the States to organize a State Nutrition Committee—some 20 years ago—and she has been in the forefront in enactment of legislation for improved quality of food, for school lunches, and for education programs of many kinds to improve nutrition. High tribute was paid to your leadership on the occasion of your 1959 Governor's Conference on Nutrition held in cooperation with the State Nutrition Committee.

I shall not presume to discuss the current nutritional needs of your State. You may, however, wish to consider your own circumstances against this description of our national situation:

1. We in this country have the food resources to produce, and on the whole we do produce, enough food in needed assortment to provide nutritionally adequate diets for everyone, at prices most families can afford. Food supplies through 1961 will be a little larger than they were in 1960, but the increase will just about match the expected increase in population, so that overall per capita consumption of food will likely be at about the same rate as in 1960. Consumer demand for food is expected to remain strong because general economic activity and employment will likely be maintained, with the flow of income to consumers continuing at a high level. Hence, while not unmindful of pockets of poverty, we still can say that the nutrition problems of most segments of the population are less economic than cultural—more related to unwise use of resources than lack of resources.

2. Basic research continues to add steadily to our nutritional knowledge. We have considerable public understanding of what constitutes a good diet. Over the years great strides have been made in overcoming dietary deficiencies and in improving nutritional well being. A larger proportion of people in this

country now are enjoying the kind of food that formerly was the privilege of the few. Judged by the standards that classed one-third of the Nation as ill-fed in the mid-1930's, about one in ten were in this category when our most recent national survey of household food consumption was made.

3. Despite these favorable aspects, we still have nutritional problems in this country. This is attested by the fact that you have arranged this State Nutrition Conference. The fine rate of dietary improvement that was shown by the successive national studies of household food consumption made in 1936, 1942, and 1948 did not continue into the 1950's. Dietary habits that are not as good as we could wish still characterize many teen-agers, many women, and many persons in our older age groups. Some people are over-anxious about their food and its nutritive value. This nation spends \$500 million or more every year for capsules, pills, and "food supplements," and food fad-dists are having a field day.

What does this mean? It means that we must develop more public confidence in modern nutritional knowledge so that people are more willing to practice what they learn about nutrition. We must develop more public confidence in the quality, safety, and adequacy of our food supply. This need for certainty on the part of consumers calls for special consideration in our nutrition programs. First, there is need for certainty of knowledge and conviction that will make for nutritional discrimination in what we choose to eat. Then there also is need for certainty about the high quality of the food on our markets—high quality in terms of nutritive value, wholesomeness, and suitability for purpose.

As to the first—the need for a firm basis for discriminating choices in planning our meals: When we compare present-day consumption of food with that of 50 or even 25 to 30 years ago we find that there have been marked changes in the proportions in which we choose to use various types of food. Statistics show (1) a national trend toward the use of more meat, milk, succulent vegetables, and most fruits—foods that improve the protein, mineral, and vitamin content of our diets; (2) a continued relatively high consumption

of highly processed sugars, and of separated fats and oils—the latter in addition to fat derived from increased use of meats, milk, and eggs; and (3) a trend away from the use of grain products and potatoes. In general, then, we have come to choose flavorful diets that contain general amounts of protein, that are high in calories, but also that provide relatively more minerals and vitamins than formerly.

Paralleling these trends in food choice there has been a trend toward more mechanization of our lives—a greater dependence on machines on the farm, in the factory, in the house, and in our mode of transportation. We choose not to walk if we can ride—not to stand if we can sit—not to use our muscles for work if we can use machines. We choose to be spectators rather than participants in sports and many other forms of recreation. In our affluent society we find it easy to consume more food-energy (calories) than we expend in physical activity.

Long ago it was advantageous, if food was abundant, to eat more than was needed for the day—people knew that there would come times when food stocks would be low, or when extraordinary work schedules would demand more calories than could be readily consumed. Such situations are now rare in this country, and the habit of overeating has led to widespread prevalence of obesity. It is estimated that a quarter of our population is overweight. Indeed, some medical nutritionists rate obesity as this country's No. 1 malnutrition problem.

Obesity is considered serious, not just because it is unsightly, or because it makes a person ungainly, or subject to ridicule, but because it is associated with mortal disease. Surgical risk is greater, and the incidence of diabetes, cancer, and renal-cardiovascular disease in our population is much greater among the obese than among those of average weight.

To what extent the disturbed fat metabolism that may accompany or follow obesity is related to the nature of the diet no one knows for certain, because heredity, hormone imbalances, and environmental stress also play important roles. But the American Heart Association recently (December 10, 1960) recom-

mended as a possible means of preventing atherosclerosis and decreasing the risk of heart attacks and strokes, the reduction or control of fat consumption with reasonable substitution of polyunsaturated for saturated fats. The Association went on to say, however, that there is as yet no final proof that heart attacks or strokes will be prevented by such measures, although a reduction in blood cholesterol by dietary means, together with weight control, may lessen the development or extension of atherosclerosis and hence the risk of heart attacks or strokes.

In so far as diet is a contributing factor to a disturbed fat metabolism there is evidence that more than just the kind of fat and the amount of fat are involved, however important these may eventually prove to be. Other dietary constituents can exaggerate or minimize effects. For example, the kind of carbohydrate, the kind and amount of protein, and the amount and proportions of magnesium and other mineral components of the diet, the balance between fat, pyridoxine, vitamin E, and other vitamins may also be of very great significance. The effects of and needs for various nutrients are interlocking and interdependent, and we cannot study one without rigorous control of all others. This complexity may explain why there seem to be so many contradictory bits of evidence about the importance of diet in normal utilization of fat by the body. What seem to be contradictory conclusions may merely reflect variable conditions under which research findings are accumulated.

We can all agree that fat is a necessary and useful component of our diets. But we still have much to learn about the interrelationships among nutrients that control the proportions in which it is best to use various types of fat, and the acceptable range between low and high consumption of fat.

Our present state of knowledge certainly indicates that it is wise to avoid obesity. Nutritionists today emphasize the preventive aspects of obesity and stress particularly the importance of helping children keep weight under control while they maintain normal rates of growth. Obesity appears to be harder to control in adulthood if persons become

overweight in childhood. Overweight children generally are less active physically than children of average weight. Their chief problem may be under-expenditure of calories rather than over-consumption of food. Whether in youth or adulthood, if one has become overweight, it is urgent to undertake a systematic program of increased physical activity—increased use of the large muscles—as well as reduced food intake.

A new tool for those concerned with weight control is the recently issued USDA publication, titled "Food and Your Weight." This gives calorie values of common measures of some 330 everyday foods and beverages as prepared for eating. The publication shows how the method of preparing food influences the calorie values of the diet. It also gives information helpful in determining about how many calories are needed to attain or maintain a given body weight.

Since good nutrition is more than just a matter of calories, this pamphlet also discusses what constitutes a nutritionally adequate diet in terms of amounts needed of various types of ordinary foods. In short-term weight adjustment programs, particularly while trying to reduce, many people grasp for simplified diets that are readily measurable. While these, including formula diets, may be effective for short-term use in emergencies, or as prescriptions for abnormal situations, man, being a social animal, must eventually come to grips with life and devise a regimen of ordinary foods, suitably proportioned to provide a fully adequate diet. Each person must develop an eating pattern adapted to his energy needs, and one that can be pursued in the environment in which he lives and works. Suggestions for such diet patterns or menus are given in the publication.

Another tool to promote improved nutrition is the USDA publication "Food for Fitness" which most of you have probably seen. This guide to good nutrition was based on a careful appraisal of current knowledge of human nutritional needs and knowledge about the nutritive values of foods in relation to present-day food consumption patterns and food resources. The guide suggests some modern emphasis needed in food selection while tak-

ing account of the need of flexibility for taste and purse. This food guide has had wide acceptance by educators, medical nutritionists, industry, and government. Over 1½ million copies have been distributed since its issuance 2½ years ago.

An essential tool for the doctor and the nutritionist in helping people adapt this guide to the needs of individuals is a reliable table giving nutritive values of food in common measures. In September 1960 the USDA issued a new table that gives information on more than 500 foods not only in terms of calories, but also in terms of protein, selected minerals and vitamins, fats, and selected fatty acids. As said before, moderate amounts of fat, including some that contain an appreciable quantity of the polyunsaturated fatty acids are necessary for good nutrition.

Up to this point we have talked about the urgent need for nutritional discrimination as we choose what to eat—the proportion in which we consume different kinds of food, and the total amount we eat, especially in relation to "over nutrition" in calories.

Another consumer concern is for a continuing supply of foods of high quality. In pioneer days almost every family had to depend on its own efforts to have its food supply. But today most of us live in towns and cities, and we depend on many persons in many places to produce, store, partially or fully prepare, and deliver our food to our homes. As the production, processing, and handling of food is farther and farther removed from household supervision, some consumers have come to feel that they have less and less knowledge about quality. They are apprehensive as to whether nutritive values are being protected; they are concerned about palatability and general acceptability, especially of processed foods; they wonder whether the "chemicals" being used as fertilizers, pesticides, or additives are necessary or even safe. For some people the mere idea of using chemicals in food production and processing breeds fear and so they fall prey to alarmists.

No nation in history has had a food supply that compares with our present supply in terms of nutritive value, safety, convenience,



stability, variety, attractiveness, and availability. To a great extent we owe these advantages to chemicals, properly used. On farms, the appropriate use of chemicals as fertilizers for crops and in animal feeds, makes it possible to produce the tremendous quantities of the great variety of foods that people need and want. Chemicals can give indispensable protection to plants and livestock against the ravages of pests and disease. In warehouses, in trade channels, in food processing plants chemicals help to improve sanitation and maintain quality. They also make possible many of our modern convenience foods, and aid in furnishing the bountiful supply of good things to eat that we enjoy today.

Grades, standards, and definitions of identity have been established for many products, and we can look forward to increasing standardization and sale of food by grade, even while there is increasing proliferation and sophistication in food forms. Fortunately our processed as well as fresh foods are remarkably good in chemical and physical properties that make for high consumer quality.

Legal responsibility for insuring the safety and wholesomeness of our national food supplies is shared by the Department of Agriculture and the Department of Health, Education, and Welfare, and by their counterparts in every State. For more than 50 years—since passage of the original Food and Drug Act and the Meat Inspection Act—the Federal Government has had responsibility for insuring that the foods which enter interstate commerce are safe, pure, wholesome, and produced under sanitary conditions and that all such products are honestly and informatively labeled and properly packaged.

Arnold Toynbee in his lecture on "Population and Food Supply," given before the Tenth Session of the Food and Agriculture Organization Conference in Rome in 1959, pointed out that some kinds of food and nutrition problems can be solved for large groups of the population when a relatively few public leaders make decisions and take action. Thus, Government can and does act to keep adulterated, unwholesome or contaminated products off the market. It can control

the improper use of toxic substances in food production, processing, or marketing. It does provide safe municipal water supplies. It does provide for the enrichment of salt with iodine, or of refined cereals with B-vitamins and certain minerals, or milk with vitamin D. It does define consumer grades and standards, establishes definitions of identity, require accurate labeling and prevent misleading advertising. It does distribute foods or money for food, and provides for dietary improvement among school children and needy families. It does all these things and can do more if such services are wanted and supported by the public.

But Toynbee also pointed out that wise food selection in the market or at the table exemplifies another type of nutrition problem—one that cannot be solved by Government action. Solving this problem requires individual action on the part of millions of citizens.

Government cannot compel each person to eat a nutritionally adequate diet. Government cannot decide for people the choices they shall make among the alternative foods available to them, or the proportions in which they shall balance one kind of food with another. The choice lies with the millions of individual men and women, boys and girls, who must, therefore, have the requisite nutritional knowledge and the motivation for applying it. Right or wrong decisions in food consumption will make the difference between good nutrition and malnutrition.

People differ greatly in their willingness to try the new—whether it is the new in substance or form that is offered by food technologists, or the new in practices in food consumption suggested by our advancing nutritional science. As educators, we will remember that food habits have changed in the past and will change in the future.

We believe that everyone really wants the pleasures that may be had at the family table, with suitable attractively prepared, palatable, nutritious food. Everyone wants the added years of life and life in years that come from applying the newer knowledge of nutrition in our selection and use of food. But not everyone has really given serious thought to the importance of food selection in achieving these goals. Science is demonstrating that health and

efficiency at every age depend in large part on the nutritional quality of diets—on the kind, quality, and quantity of the foods we eat. When people are truly convinced of this, they will, if need be, change their attitudes toward food and their expectations about food, and hence their patterns of food consumption.

A veritable revolution in diets has been in progress in this country over the years. It will

continue, if research and education, producers and consumers cooperate, until everyone shares fully in the goal of a well-fed America. State Nutrition Committees have a big share in the cooperative effort to have our excellent food supply used for the highest purpose. I am sure that the South Carolina Nutrition Committee will continue to be a leader in helping our country to attain this goal.

## FOOD CONTAMINANTS AND HEALTH

PHILIP L. WHITE, Sc.D.

*Secretary, Council on Foods and Nutrition*

*American Medical Association*

Many times you may have wondered why food must be sprayed, dusted, degerminated, enriched, colored, de-colored, conditioned, emulsified, flavor enhanced, and on through the many manipulations of foods in the “convenience” diet. Why subject the public to any possibility of harm from the many chemicals used in food?

The contributions made by chemical substances in food production, processing, and preservation to quality and quantity of our food supply are recognized. Many chemical additives are essential to efficient agricultural production and others are vital to the manufacture of processed foods.

A misconception, too common, is that all “chemicals” are harmful, and this is related to the idea that any amount of a “poison” is harmful. Additives like potassium iodide in salt and vitamins in flour, breads, rice, and grits are making important contributions to the health of our people. Yet, iodine and certain vitamins would be harmful if consumed in excessive amounts.

The Miller Amendment of 1954 to the Federal Food, Drug, and Cosmetic Law has provided for the establishment of safe limits or “tolerances” for residues of pesticides which may remain on fresh fruits and vegetables when shipped. These tolerances are based upon results of animal tests which the pesti-

cide manufacturer is required to submit. There must also be ample evidence that these tolerance amounts will not be exceeded when the product is used according to the directions on its label. The pesticide label must be registered with the U. S. Department of Agriculture, and that Department must certify to the Food and Drug Administration that the product will be useful in agriculture.

The federal regulations that cover the use of the agricultural sprays are considered by most people to be adequate. The tolerances for residues have been based on good judgment.

In accordance with the Food Additives Amendment to the Federal Food, Drug, and Cosmetic Law, food and chemical manufacturers are now required to run extensive animal feeding tests on any additive before they are marketed. This applies equally to substances added directly to foods and to substances likely to contaminate food as a result of some incidental use in food processing. Food packaging materials which may enter the food itself are covered. The law also applies specifically to processes for irradiating foods for preservation or other technical effect, and it covers any residues which may carry over into meat, milk, or eggs as a result of use in animal feeds.

From the evidence presented to date, there appears to be no need for fear since the levels of contaminants are well below the response

Presented before the South Carolina State Nutrition Committee January 24, 1961.

levels in humans. But, notice that I said "no need for fear." I do not wish to imply that there is, therefore, no need for concern. There is no reason to become complacent. Constant surveillance and checking of foods is necessary.

The answer to the question of why it is necessary to use such a variety of agricultural sprays is simple — economics. The cost of producing food without them would be prohibitive. The loss of crops to uncontrolled insects and crop diseases would jeopardize our farm economy. Even with the chemical and mechanical aids available to our farmers, the loss is staggering. The U.S.D.A. Agricultural Research Service reports "... losses to crops during production due to insects and diseases, mechanical damage, hail, weeds, and inadequate harvesting amount to about \$8.3 billion annually in value of products lost. These losses constitute 20% of the potential production of all farm and forest growth. They are estimated as follows:

Diseases of crops	6.9%
Insects attacking crops	4.7%
Mechanical damage, hail, and weeds	5.9%
Harvesting losses	2.7%

"Furthermore, losses during storage, marketing, and processing account for \$3.9 billion, which is equivalent to about 14% of the total value of the products or to over 6% of the total farm and forest production."

There is no doubt that DDT is so widely used that there is a lot still scattered around. Even so, the tolerances set for DDT in foods are believed to be realistic, and amounts found to date are well below the tolerance levels. There is no tolerance for DDT in milk, however, and this is unrealistic. According to the Food and Nutrition Board of the National Research Council:<sup>2</sup>

"The criterion of safety is, of course, of greatest importance, but residues of pesticides in milk are not *per se* more hazardous than residues of the same pesticides in other foods. The policy of zero tolerances hinges on the premise that for certain groups milk is the sole or major item of food and that these groups may be more susceptible to toxic actions than are others in the population.

"There is no evidence or reasonable basis for presuming that extremely small residues of pesticides in milk are peculiarly hazardous for the infant. In any event, at a few weeks or months of age, the infant is given foods that may contain residues of pesticides. These residues are deemed safe. It is unscientific to insist that, in order to be safe for infants, cow's milk must be absolutely free of residues of pesticides permitted in other foods.

"In accordance with the foregoing, the Food and Nutrition Board believes that the present policy that only zero tolerances for pesticide residues in milk can be permitted is not scientifically justified. Regulations would be scientifically sound if based on reasonable judgments assuring safety in the case of small residues that are unavoidable in milk even under the best production practices."

So much for spray residues in foods. Let us now turn our attention to the intentional food additives. There are a large number of them, and the Industry and the F.D.A. are working diligently to screen them for safety.

Everyone will agree that no additive should be used to mask an inferior food or to disguise spoiled or unsavory food. No respected manufacturer would even think of doing this; yet it happens. Let me give you a recent example of the results of the improper use of an additive developed to enhance the color of meat. We recently received the following letter from Pennsylvania:<sup>3</sup>

"I would like to bring to your attention a reaction to a commercial meat preservative which occurred in two members of my household recently. Both of them suffered a severe erythema of the skin ('boiled lobster' appearance is not an exaggeration), marked diaphoresis, tachycardia, dryness of the mucous membrane, and severe itching. The reaction was quite alarming.

"I was able to determine that the ground meat they had eaten about ten minutes before contained an unknown quantity of Asconic. This product is used to preserve the color of meat when exposed to air. I was informed by the manufacturer that the contents are sodium nicotinate, sodium ascorbate, and dextrose so that it was immediately apparent that the reaction was a vasodilation effect from the



nicotinic acid, and as such, relatively harmless and self limited. In fact in both patients the ill effects subsided in two or three hours. In the present situation it developed that the butcher, instead of following the directions on the product, added an unmeasured quantity, obviously more than directed. I have found since then that several of my colleagues and friends can recall similar milder blushing and itching reactions in themselves which were passed off as 'allergic' reactions but which, in retrospect they think followed meals in which they ate chopped meats."

Late last fall, some students at Northwestern University became ill soon after dinner at one of the sorority houses. The same symptoms were noted. Although all recovered quickly, most suffered considerable discomfort. The meat served had been treated illegally with sodium nicotinate to produce a red, fresh appearance. A significant excess of nicotinate was obvious because erythema seldom develops with an intake less than 100 mg. at one time.<sup>4</sup>

These two examples occurred a thousand miles apart — yet they are related. These people were fortunate; apparently the meat packer just used too much Asconic. Suppose the Asconic had been used to cover up tainted meat as well as to enhance the color!

These examples illustrate the importance of informative labeling of all ingredients, the necessity for standardized nomenclature for food additives, and the value of a complete registry of industrial food additives in a central poison control center.

With approximately 1,800 food additives and 1,000 flavoring agents listed, "need" must be considered. This rather mundane attitude was more prevalent ten years ago when sufficient justification for adding an agent to food was required.

It is not difficult to understand why we have such a large number of food additives. Competition in the food industry is keen and our chemical industry does not lack imagination in the development of agents useful to the food industry.

The constant search for technological improvements in the food supply is praiseworthy. But, these advances must be achieved

without the sacrifice of nutritional quality or the assumption of risks from inadequately tested additives disproportionate to the advantages gained.

As a member of the consuming public, I may be intrigued, but not vitally concerned, about how much noise a convenience food makes when I chew it, whether it floats or sinks in milk, whether mold will grow on it for six months. I am concerned, however, if these feats have been accomplished at the expense of nutritive quality.

Let me give you an example of so-called technological advancement. The continuous baking process is a method for the mass baking of bread in a never-ending process. Although the original machine investment is considerable, the savings on ingredients, time, and man-power quickly make up the difference. The bread is nice and light, squeezes properly, and enjoys a long shelf life. It seems to satisfy the consumer. It looks like technological perfection. The drawback is its inferior nutritive quality. Most bread contains from 3% to 6% milk solids and accordingly makes a significant calcium contribution. Six slices of enriched white bread made with 6% milk solids will contribute 120 mg. of calcium to the diet. The continuous process bread is now made with only 0.5% milk solids and is, therefore, proportionately inferior nutritionally.

The Delaney Clause in the 1958 food additive amendment to the Federal Food, Drug, and Cosmetic Act prohibits the setting of tolerances for the use of carcinogens in foods. This special provision contributes nothing to the safe use of food additives since any hazardous use of a food additive is already prohibited. The clause is absurd from the scientific standpoint since it reverts to the doctrine that substances can be classified either as poisons or non-poisons. The clause could prohibit the addition of certain essential nutrients to foods if, as is not improbable, these were shown to cause cancer under extraordinary conditions of use. A strictly literal and overly broad interpretation of the Delaney Clause to cover infinitesimal and unavoidable contaminants in food would disrupt our food supply. Through the use of extremely sensitive methods, contamination of foods by arsenic in

the soil, strontium-90 in fallout, and certain ingredients in animal feeds can be demonstrated even though quantities present are below the level of any possible biological significance.<sup>5</sup>

From my point of view, one of the most encouraging reports is that of the Special Committee on Chemicals and Health Hazards prepared for the Governor of Wisconsin.<sup>6</sup> The Wisconsin report contains the following recommendations:

1. That there be support of research, especially toward the establishment of tolerances.

2. "The substitution of a less rigid regulation providing that no substance with the ability to induce cancer following ingestion by man or animal could be employed in foods or appear in foods *unless a safe level of use can be established* through research and through evaluation by a properly qualified board of experts."

3. The report emphasized the importance of following labels and of educational programs to warn and advise the public and producers that pesticides and animal feed additives be employed according to established procedure and that only through proper use can safety of the applicator and the consumer be assured.

The Wisconsin report went on to recom-

mend prior notification of any sudden changes in the regulations governing the use of feed additives and pesticides; that the agencies involved provide regular releases telling of their activities. Further, the committee recommended that all agencies act to counteract misstatements and to counteract malignments of competent workers. It was especially enthusiastic in its recommendations that adequate funds be provided to greatly increase research and control. To this I add a hearty amen.

Encouragement should be given to the revision of state laws to provide uniform regulations for all foods whether or not they enter interstate commerce. The federal agencies do not have jurisdiction over foods that are produced and sold locally. This is now the biggest loophole in our food regulations. At present not only the laws but also the laboratories and the inspection service in most states are inadequate to conduct a food control program comparable to that of the federal agencies.

Public funds should be appropriated to support research and testing on the toxicology of food additives and the causation of cancer by chemical substances. Only when sufficient scientific knowledge is obtained in these areas will we be in a position to make progress that is needed in the expanded use of safe food additives.

#### REFERENCES

1. Agricultural Research Service, U. S. D. A., *Losses in Agriculture*, June 1954 — quoted from Simone Dormal, Panel V, Effects of Processing and Additives on Foods, Fifth International Congress on Nutrition, Washington, D. C., 1960.
2. Statement of the Food and Nutrition Board, N. R. C., in regard to Tolerances for Pesticide Residues in Milk, National Academy of Sciences, Washington, D. C., September 1960.
3. Private communication.
4. (a) Goodman, L. S. and Gilman, A.: *The Pharmacological Basis of Therapeutics*, The Macmillan Co., New York, 1958. (b) Sollmann, T.: *A Manual of Pharmacology*, W. B. Saunders Co., Philadelphia, 1957.
5. *The Safety of Chemicals in Foods or The Safety of Food Additives* — Statement of A. M. A. Council on Foods and Nutrition, to be published.
6. Report of the Governor's Special Committee on Chemicals and Health Hazards, Madison, Wisconsin, 1960.



## President's Page

By the time that you read this type (I hope) the fourth of July will be gone, but the meaning of what the fourth of July represents should remain forever in the minds of every American. Just as the Fourth of July stands for the hard won freedom that the forefathers of most of us in South Carolina won in 1776-1781 by hardships and the shedding of their blood, so should that freedom remind us as doctors of the independence that we have enjoyed over the years in the practice of medicine. It also should remind us that that freedom is being attacked yearly, and that bit by bit we are being denied that for which the Declaration of Independence was drawn up to protect.

Senator Strom Thurmond in his "Report to the People" on 3 July states, "Because we still live in a relatively free society, although our liberties are being constricted with every increase in government growth and every new welfare program, we, the people, still have the power of choice. We can insure our liberty 'for ourselves and our posterity', or we can make the choice to release it all at once or a little at a time."

I don't think that truer words have been spoken, and certainly we have been losing our freedom in medicine a little at a time, from the time that the Murray-Dingel Bill was defeated in the late 1940's. The chance to stand up and be counted among your medical colleagues will soon come around again, for it is reported that hearings on the Anderson-King Bill will come up some time after the fourth of July holidays. So be on the alert, and if and when this Social Security tax bill appears on the agenda let your voice be heard clear and loud. There is plenty of literature about this pending bill obtainable from the AMA for the asking. Impart opposition to this kind of legislation to your fellow doctors and to your patients and to anyone else whose ear you can get.

In closing, I would like to quote from Senator Thurmond's letter again, "The Founding Fathers exercised the utmost in human wisdom to secure it (Freedom) for us in the Constitution and its Bill of Rights. THE LEAST WE CAN DO is preserve what is left of that precious legacy which had its beginning on JULY 4, 1776." Substitute medicine as one of the freedoms here, and you can definitely see a DUTY that is YOURS.

Charles N. Wyatt



# Editorials

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## POLITICS AND MEDICINE

Politics are an essential ingredient of the American system. They are inevitable in any group action. While they are generally thought of in connection with the activities of government, they are by no means confined to that sphere. Wherever more than two people are concerned and questions of leadership or of policy are to be determined, politics in some form are present; for if no more than three are involved, there will be the effort on the part of at least two to influence the third.

There are, however, politics *and* politics. Leap years, the years whose numerals are divisible by four, are the big political years in the United States. And when the divisions of politics and politicians are based upon issues, upon the variations in views and ideas held by different men, they are wholesome and healthful, despite the tendency of most of us who do not actively participate to speak lightly, on occasion, of those who seek office as mere politicians, and of the manner in which they seek to advance themselves as "playing politics". Actually, we know that there is no other way by which large groups of people, or any groups, can exercise their will in an orderly manner.

It has seemed to many people in the last decade or so, however, that good, old-fashioned, down-to-earth, practical politics, a wholesome element in itself, has been degraded and prostituted by the Madison Avenue boys and the news media, by the wealthy and by the masses, by subsidized press, television and radio on the one hand, and high-pressure telegram and letter campaigns, labor unions, and oldsters' organizations on the other. Virtually everybody agrees that the two-party system in the United States is good. That is another way of saying that we recognize the right of an individual to have ideas and ideals different from our own, and the right of everyone to associate himself with those of similar views. While Republicans may feel that the Democratic Party is simply a

catch-all for the "great unwashed," the unlettered masses, and the unfortunates who perforce depend on the Government to a greater or less extent to see them through, and Democrats have an equally bad or worse opinion of the Republicans, fair-minded persons will agree that there are basic points of difference in theory as to the policies best calculated to produce the happiest results in the long run for our nation.

The medical profession, some twelve or fifteen years ago, gradually swung around to the knowledge that politics, far from being just a "dirty word," was something in which it had to become interested. The profession did so when it was virtually forced into that position, by reason of the developments in the American scene resulting from a number of contributing causes. Regardless of what we might like to think and of how we yearn for the good old days, times do change and we do progress, and American medicine has found it necessary to change its attitude toward a number of things, including, and very importantly, politics. With this we certainly have no quarrel. The large number of doctors in the United States are citizens who contribute immensely to the welfare of the people of the nation. They are in position to, and do actually exercise a tremendous influence, directly through their patients, and through the prestige acquired by their profession in years gone by. Of course doctors should be interested in politics, in the issues of the day, and those who feel so inclined are thoroughly justified in aligning themselves with the groups who support the sides of issues with which the profession agrees. But it would be unfortunate if the medical profession permitted itself in its alignment to become so closely associated with one or the other of the extremes of economic beliefs that it becomes simply a tool in the hand of big business, or any other group. The medical profession, we believe, should try to retain, above all, its ideals as a profession, and its activity in the role of politics, governmental or

otherwise, should not deviate from the line of the greatest service to humanity (rather than service to itself), as the pole star by which its activities should be directed. Most of all, we think, the profession should not permit itself to be pressured into the role of practicing petty, personal politics.

What we have tried to say above applies principally to the profession's activities in the area of government, state and national. It is no less true with respect to the area of self-government by the profession itself.

Most members of the South Carolina Medical Association are doubtless at a loss to understand the defeat of Dr. Julian P. Price by a substantial majority for the office of President Elect of the American Medical Association at the recent annual meeting held in New York the last week in June. The answer is, in one word—"politics." And politics, not in the broad view of the wholesome type, based upon a difference in viewpoint or as to great issues confronting the profession, but politics of the common, ordinary, garden variety, as petty as anything either the Republican or Democratic Party could boast of or be ashamed of. Members of the State Association, which was served by Dr. Price efficiently and well for ten years as its Secretary-Treasurer and Editor of its Journal, will, we believe, be interested to know some the tactics, and some of the "poison" that was put out against him, and which contributed most effectively to his defeat. Analysing these, they can be grouped in three broad classifications: a) recent actions by the Board of Trustees of A. M. A.; b) the alleged position of Dr. Price on certain public issues; and c) the image of American medicine.

For the past year Dr. Price has served as Chairman of the Board of Trustees, of which he had been a member some eight years previously. Within this twelve-month period, the Board took several actions, believing them to be in the interest of the Association, and with most, perhaps all, of which Dr. Price no doubt agreed. But in every instance they were the result of Board decision, not edict of the Chairman.

The expenses of the national organization in recent years have been unusually heavy and

revenues from advertising have tended to decrease. For these, or whatever other reasons, it is a fact that the financial situation of A. M. A. within the past two years has not been as good as previously. This is evidenced by the fact that the Board proposed at the Washington meeting in December, and the House of Delegates last month approved, without opposition, a raise in dues by ten dollars next year and ten dollars the following year.

Having this in mind, and, also, perhaps, with an eye toward the "image" of medicine, as it might be presented accurately or otherwise, the Board decided within recent months that henceforth no alcoholic beverages should be served at meetings, or preceding meals in connection with meetings at 535 North Dearborn Street. When one realizes the large numbers of Councils and Committees of A. M. A. and the extent of their constant activity, the various groups which assemble at headquarters from time to time, and the total expense of liquid refreshment, the position of the Board can be readily appreciated.

A number of the Councils sponsor conferences and other meetings from time to time throughout the year. These cover one or two days and almost invariably include one or two luncheons, the expense of which is borne by A. M. A. The Board of Trustees, likewise, and for the same reason as indicated above, decided that no lunchcons should be preceded by a cocktail hour at the expense of A. M. A.

It is a matter of common knowledge among his friends and acquaintances in South Carolina and Chicago that Dr. Price is not a drinking man. We have never known him, however, to be disagreeable about the subject. He is a believer in individual freedom and does not try to dictate or prescribe the conduct of others. But the fact that his personal habits were such as they are made it easy for the individuals who were anxious, for personal reasons, to defeat him for the office, to hang upon him the onus (if onus it be) of drying up the luncheon occasions and the meetings at 535 North Dearborn.

Another action of the Board during the last twelve months concerned the travel expense of members of Councils and certain other high officials. Again, with an eye to preserving the

financial situation of the organization, the Board of Trustees directed that henceforth the incurring of such travel expense should be first approved by the Chairman of the Committee or Council involved, and the request transmitted through the office of the Board Chairman for final authorization, since the Board is the financial agent of the Association. Whatever may have been Dr. Price's attitude toward any of these three questions, and we believe he may have been in favor of them, anyone at all familiar with parliamentary procedure knows that the Chairman has only one vote like each of the other members, and that, usually, it is not cast at all. But perhaps a disadvantage that goes along with being the chairman of any group is that of being a target for the darts of the malcontents dissatisfied or personally affected by its action.

So much for Dr. Price's alleged misdeeds as Chairman of the Board of Trustees. Other charges made against him in the whispering campaign, concerned what was supposed to have been his position on certain public issues in which the medical profession is interested.

Sometime ago representatives of the American Association of Physicians and Surgeons met with a committee of the Board of Trustees, and among the items discussed was a recent public statement by high officials of the National Council of Churches supporting the principle of Forand-type-legislation—medical and hospital benefits for people over 65 under the Social Security system. Some of those present at the meeting of the doctors felt that the American Medical Association, in turn, should issue a statement condemning the National Council for its action. Dr. Price reminded the group that the church body is itself a potent organization, numbering in its membership many of the largest and strongest Protestant denominations, having, in turn, millions of adherents throughout the country; that although its stand on this, and possibly other issues, differed from that of A. M. A., the Council represented a substantial and influential body of opinion, to which they were clearly entitled, and that it would be well for officials of A. M. A. to give careful consideration to the wording of any statement issued, and to the advisability of issuing such a statement at all.

When the incident was reported in the political atmosphere prevailing around the halls and hospitality rooms of the Statler-Hilton in New York, those to whom it was related were given to understand that Dr. Price had supported the position of the National Council as against that of the American Medical Association, and, therefore, tacitly, at least, had aided and abetted the cause of the proponents of medical care for the aged under Social Security.

Another false and equally reprehensible report was circulated. It had been suggested that the Board transmit to the House of Delegates a proposed Resolution encouraging further the removal of barriers to membership in state and county medical societies on account of race or color. The Board, while approving the idea, felt that such Resolution would be more effective originating from within the House itself. Accordingly, a member of the Board of Trustees volunteered to take the proposed expression which had been prepared and see if he could find delegates who would be disposed to introduce it in the House. Delegates from Southern states to whom the Resolution was shown, however, were told that this was a move initiated and being pressed by Dr. Julian Price. The effect of such a statement, with the innuendoes which accompanied it, upon delegates from certain Southern jurisdictions can well be appreciated, and yet the fact of the matter was, that Dr. Price had nothing whatever to do with the initiation or sponsorship of the proposed Resolution.

Finally, as to the "image" of American medicine as it should be presented through its President Elect. It was argued, and we agree, that in this critical period of conflict with the Administration, as the result of sharp division in views concerning several issues regarding medical care and how it should be financed, the profession needs at its head an aggressive, forceful figure to express its views, one able to hold his own in public debate with leaders of the opposition, say with Walter Reuther, or Secretary Ribicoff of the Department of Health, Education and Welfare. Undoubtedly, those reflecting this view must have recalled the appearances of the President and President Elect of A. M. A. several months ago on



the hour-long CBS broadcast, and also the subsequent TV debate between Walter Reuther and Dr. Edward R. Annis. Had it been possible for the opposition to present Dr. Annis as a candidate (as we understand they earnestly attempted to do) or one who, like Dr. Annis, had proved his skill and adroitness in public debate with the best that the opposition has to offer, there might have been some basis for their argument. But that, definitely, was not the case. Not only had Dr. Annis turned down the invitation to run, but so, also, had at least four or five others, some of whom now occupy important official positions in the organization. If there was a basis for projection of the idea that the candidate who opposed Dr. Price and was elected could be any more effective in this field than Dr. Price could have been, there has been no evidence of it so far, and, from all outward appearances, the contrary is true. Certainly, no candidate who could have been chosen would have been more experienced or well-versed, through his dedication to the cause of organized medicine and his experience over the past eight years, than Dr. Price. The only qualification along this line of his opponent, so far as we know, is the fact that he has been a member of the Board of Trustees for some two or three years. If he has shown his capacity in public debate, or as a spokesman for the national organization, the fact has entirely escaped our notice.

We strongly suspect that, while these were the arguments used, the real basis of Dr. Price's difficulty in this field is the fact that he is a modest, unpretentious man, without the flare and flamboyance which the organization perhaps likes to see in its leaders. He may not be a gifted orator, but as to his capability as a writer and speaker in clear, well-considered, precise and effective language, there is ample proof in his writings and speeches, of which there have been many within the past few years. Those who are acquainted with Dr. Price know full well that he prides himself in being, at all times and in all places, just what he is. There is no pretense about him. He does not, we admit, represent the picture of the wealthy American doctor, the financially successful professional business man, but on the other hand that of the dedicated physician,

interested in his patient, the public generally, and in the highest ideals of the medical profession. In this observer's very humble view, nothing could have done more to elevate the stature and enhance the image which the medical profession should present in this critical time, than the selection of Dr. Julian Price as its chief executive and spokesman for the organization.

Of the right of the House of Delegates to make their own choice, of course, there cannot be the slightest question. Their choice was made effectively, but it is exceedingly unfortunate that a great organization, composed of men and women, having enshrined in their traditions the highest principles of service to humanity, must have been influenced in their selection to such a large degree by petty considerations, false representations, and spurious arguments against the choice of one dedicated to his profession and its true ideals, and qualified by ample experience. The American Medical Association, not Dr. Price, was the loser.

M. L. M.

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### HELP FOR THE AGED

While efforts persist in Congress to produce drastic and undesirable plans for medical assistance to aged persons under the Social Security system, South Carolina with a relatively few other states is proceeding to implement the provisions of the Kerr-Mills bill which has already provided what appears to conservative medical people to be a satisfactory answer to the problem.

Under the provisions of this latter bill, federal aid will be extended to nearly 50,000 people 65 years or over in this state who cannot finance hospitalization or nursing home care when illness takes them. No provision is made in South Carolina or elsewhere for payment of professional medical bills.

The program was scheduled to start on July 1 and applies to persons with income or resources of \$1,000 or less per year; it will involve about a half million dollars voted by the General Assembly and about two million dollars to be contributed by the taxpayer through the federal government.

The present estimate of disbursements is estimated as follows: for hospital care

\$1,300,000, for skilled care in nursing homes \$440,000, for out-patient clinic service \$660,000, for a total cost of \$2,400,000. The South Carolina Medical Association and the South Carolina Hospital Association have both been working in close harmony with the State Department of Welfare which handles the funds and administers the details of the law.

It is unfortunate that the advocates of more radical plans have not been willing to give this apparently promising and satisfactory effort a sufficient length of time for proper trial before pushing on to schemes which to American medicine seem impractical, complicated, and extremely dangerous to the American way in medicine.



**DR. WILLIAM A. BOYD**

The passing of Dr. William Augustus Boyd on June 28 last leaves a gap in the ranks of the profession that will probably never be filled. For Dr. Boyd was the product of an earlier era in medical education, and a true pioneer in the field of orthopedics. Our modern system of training may produce as capable surgeons as he. Some of our younger men may become as esteemed by their contemporaries or as beloved by their patients as he. But in any of the younger orthopedists there must be lacking that span of experience, that quality of having been there from the emergence of the specialty which cast the

glow of authority upon every facet of his professional life.

This aura of superiority might have become coldly repellant in anyone less human than he. But in Dr. Boyd, coupled with his warm and friendly personality, his love of life and laughter, and his genuine interest in the happiness and welfare of his patients, students and associates, the professional eminence emerged as a benign paternalism. The honors which accrued to him, the positions of responsibility he held in a wide variety of organizations, were more than equalled by the love and affection of all who knew him. In his native South Carolina, and nationally in his chosen specialty of orthopedics, Doctor Billy stood out as a beloved patriarch, and it is in this character that he will be most acutely mourned and most warmly remembered, alike by his august colleagues, his devoted followers, and the host of crippled children to whom he brought comfort and healing during his long and active career.

J. A. S.

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#### **THE MOOD OF CONGRESS ON THE KING-ANDERSON BILL**

The moods of Congress are not easily discovered by questionnaire, but *Medical World News* has made an attempt to obtain some idea of where individual Congressmen stand on the administration bill which embodies the proposals for care of the aged through Social Security.

While the replies to the poll were not nearly complete, some idea may be gotten from those responses which came in. Certainly the response made at this time may not be valid by the time this *Journal* is in print, but for what it is worth, we give the report as published.

Apparently the greatest opposition to the administration bill lies in the South and the Southwest. In the general area in which we live 43 Congressmen go along with the AMA in opposing the King Bill while only 6 appear to favor it, while the Senate count is 10 against the Bill and 2 favoring it. Reluctance of the Congressmen to stand up and be counted makes the reporting very incomplete.

Our own people are tabulated by *Medical World News* as follows:

1. Senator Johnston made no answer to the questionnaire.
2. Senator Thurmond was not in favor of any program for the aged and was opposed to tying any such possible program into Social Security.
3. Mr. Rivers made no answer.
4. Mr. Riley believed in a program for the indigent aged, but not in conjunction with the Social Security.
5. Mr. Dorn was not in favor of a program for the aged and did not think any such program should be tied in with Social Security.
6. Mr. Ashmore made no answer.
7. Mr. Hemphill made no answer.
8. Mr. McMillan made no answer on the question of the desirability of a program for the aged, and declined to answer whether or not any such program should be connected with the Social Security structure.

Certainly these figures are not enough to make us feel too happy that all of our representatives in Congress are enthusiastically inclined to go along with Medicine's position. Certainly too, they should indicate to us that much private and pointed conversation with these representatives is in order if we are to present a strong front against the bill. Even though it is unlikely that the Bill will be voted on until 1962, the time is short and the stakes are high. We should be very busy helping our candidates mend their fences.

Long Life ahead: On the average, the baby born today in the United States can expect to live 50% longer than the infant born in 1900. At that time, average life expectancy was 47.3 years, but last year it was 69.7, the Health Information Foundation points out.

#### *Today's Health*

This gives him a chance to pay what he owes to the Government when he is born, provided the Government will let him work long enough to pay it off.



Dr. Joseph D. Thomas

#### NEW COUNCILOR, 8th DISTRICT

Dr. Joseph D. Thomas, Fairfax native, was elected at the recent SCMA meeting in Charleston as Councilor for the 8th District, comprising Orangeburg, Bamberg, Calhoun, Hampton, Allendale and Barnwell Counties, to fill the unexpired term of President-elect Dr. James H. Gressette. After undergraduate study at The Citadel and Yale University from which he received the B. S. degree in 1945, Dr. Thomas was graduated from the Medical College of South Carolina in 1948. He interned and served one year medical residency in the Jersey City Medical Center immediately thereafter, returning to South Carolina in 1950 to enter general practice in Denmark, South Carolina, where he has worked continuously with the exception of two years in the Army 1953-55. Dr. Thomas is on the active staff of the Bamberg County Hospital and courtesy staff of the Regional Hospital at Orangeburg and the Barnwell County Hospital.

Dr. Thomas is married to the former Miss Betty Heriot Guess of Denmark and they have two sons and a daughter. He is a member and deacon of the First Baptist Church in Denmark and of the local Lions Club. He is a member and past president of the Edisto Medical Society.



# REPORT OF BENEVOLENCE FUND DIRECTORS—

O. B. Mayer, M. D.

Thomas G. Goldsmith, M. D.

W. Atmar Smith, M. D.

The Annual Meeting of the Board of Directors was held in Charleston just prior to the meeting of The House of Delegates as required by the resolution creating the Board of Directors. The chairman submitted the financial report which had appeared in the *Journal* prior to the meeting. It was pointed out by one of the members that there was an error in the amount appropriated to the fund by the Medical Association. The chair was directed to take the matter up with the treasurer and the executive secretary of the Association and to make a more complete report in an early issue of the *Journal*.

The chairman submitted an application for \$65.00 made at the request of the Greenwood-Abbeville Woman's Auxiliary for assistance of an invalid daughter of a deceased physician. The chairman was directed to contribute this amount at once and to make inquiry as to further needs of this deserving woman. The chairman was also directed to inquire into the needs of recipient #1, and recipient #2, two disabled physicians and if their needs remain the same, to continue the present allotments to them. The chairman reported that he received information from the South Carolina Thoracic Society that they would contribute \$100.00 for the establishment of a permanent fund under the benevolence fund, only the interest of which could be used for distribution. The chairman estimated that the budget for the year would probably be about \$1800.00 provided no new beneficiaries applied.

On April 26, the chairman, in response to an invitation, addressed the South Carolina Woman's Auxiliary at its annual meeting setting forth the purpose and the needs for the benevolence fund. Modesty forbids extolling the impressiveness and eloquence of the address but it does not preclude the observation that the beautifully dressed and charming audience was patient and apparently interested. The chairman was inundated with checks from various local auxiliaries after the meeting. The attached financial report is proof of this interest. The chairman has written personal letters to each of the secretaries of the various local units expressing gratitude of the directors.

Subsequent to the annual meeting of the directors, inquiry revealed that recipient #1 was having a difficult time and showed a worsening of his financial situation. At a correspondence "Meeting of the Board" it was decided to allot this recipient \$75.00 a month. The following is a financial report recently received from M. L. Meadors, executive secretary:

# BENEVOLENCE FUND SOUTH CAROLINA MEDICAL ASSOCIATION RECEIPTS

Received from Class of 1910, Medical College of South Carolina, July 1, 1960	\$ 50.00
Received of Mrs. George W. Smith in honor of Executive Committee of South Carolina Woman's Auxiliary, April 26, 1961	100.00
Appropriated by Association, July 1960	500.00
Appropriated by Association, October 26, 1960, for balance of 1960	800.00
Appropriated by Association, October 26, 1960, for 1961	1000.00
Received from Woman's Auxiliary to Anderson County, March 2, 1961	20.00
Received from Woman's Auxiliary to Lancaster County, March 8, 1961	10.00
Received from Woman's Auxiliary to Richland County, March 16, 1961	25.00
Received from Pee Dee Medical Auxiliary, March 21, 1961	25.00
Received from Greenwood-Abbeville Medical Auxiliary, April 14, 1961	10.00
Received from Newberry County Medical Auxiliary, April 17, 1961	5.00
Received from Charleston County Woman's Auxiliary, April 21, 1961	75.00
Received from S. C. Trudeau Society, May 16, 1961	100.00
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	\$2720.00

## DISBURSEMENTS

Recipient #2	
May 16, 1960	\$ 50.00
Nov. 11, 1960	150.00
Nov. 30, 1960	75.00
Dec. 31, 1960	75.00
Jan. 30, 1961	75.00
Feb. 28, 1961	75.00
Mar. 31, 1961	75.00
Apr. 30, 1961	75.00
May 31, 1961	75.00
Recipient #1	
Aug., 1960	100.00
Nov. 30, 1960	100.00
June 2, 1961	75.00
Recipient #3	
May 25, 1961	65.00
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TOTAL DISBURSEMENTS	1065.00
BALANCE ON HAND	\$1655.00

To the above amount should be added a check for \$150.00 from the Woman's Auxiliary of the Greenville Medical Society. This will increase the balance in the fund to \$1805.00.



# BLUE CROSS . . . BLUE SHIELD



"MICHIGAN MEDICAL SERVICE was host to some 300 physicians in Detroit last month for a conference on medical economics. The program was designed to provide delegates an opportunity to consider the principal problems affecting the economics of medical care in the nation and to suggest means whereby these problems might be more effectively met by the mechanism of voluntary health care prepayment Plans.

The Honorable Frank Blackford, Michigan Insurance Commissioner, told the delegates that the importance of nonprofit prepayment Plans as instruments of effective community action to meet health care costs is undeniable. But he warned that voluntary insurance is under severe criticism, which must be met by implementing effective measures to promote more efficient administration in order to assume maximum benefits at minimum cost.

Commissioner Blackford emphasized that public criticism of health care programs cannot be denied or minimized and that the future of voluntary health insurance depends on the degree to which these pro-

grams succeed in providing an economical and beneficial service to subscribers. With reference specifically to Blue Shield, he said that performance is the only real measure of a Plan. "The public," he stressed, "judges Plans by what they do and not on the basis of the way they are described." Commissioner Blackford also said that Plans must demonstrate a greater sensitivity to public need and demand and continually strive to adapt their programs accordingly. He added that Plans must respond realistically to suggestions for change if they hope to continue as a dynamic force promoting community health.

Commissioner Blackford reminded the delegates that in the long run it is merit alone that will determine the success of Plans. And he told the conference that Plans must correct their own deficiencies in order to advance and refine their programs so that government will have no reason to "intrude itself into the health care field."

*National Association of Blue Shield Plans' Newsletter*, (July, 1961)

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## News

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### ATTORNEYS AND DOCTORS HOLD PANEL ON MUTUAL PROBLEMS

A "trial" designed to demonstrate some of the problems involving lawyers and doctors was held in Columbia on July 1 during a joint meeting of the members of the Richland County Bar Association and the Columbia Medical Society. The purpose was to portray some of the problems the men of both professions often encounter by the nature of their vocations. It was decided that a trial, presided over by a judge, with plaintiff and defense, and medical witnesses would best emphasize some of the questions involved. At the conclusion of the "trial" a panel discussion took place. Doctors appearing on the panel were Drs. Albert E. Cremer, James C. Vardell, Jr., James T. Green and Izard Josey. Dr. Weston C. Cook and Yancey A. McLeod, Esq., presidents of the respective organizations, conducted the meeting.

Dr. J. P. Booker and Dr. S. B. Moyle have moved into their new Medical Center at S. Broad at Church St., Wallhalla, S. C. and announce the association of Dr. William D. Gilmore, Jr. with them in the general practice of medicine and surgery.

### State Board of Medical Examiners

The State Board of Medical Examiners of South Carolina met at the Columbia Hotel, Columbia, South Carolina, on June 26, 27, 28, 1961. On June 27th the Board interviewed applicants for a medical license by endorsement of credentials. Four physicians were licensed to practice in South Carolina. They are as follows:

Dr. Stanley A. J. Mueller, Jr. is a 1956 graduate of George Washington University School of Medicine. He holds a certificate of the National Board and is licensed in California. Dr. Mueller is serving a residency in Orthopedic Surgery at Greenville General Hospital.

Dr. Blanchard C. Phillips, Jr., a graduate of Bowman Gray School of Medicine (1957), recently completed two years in the U. S. Air Force. Dr. Phillips is licensed in North Carolina where he served his internship. He is in general practice in Williams.

Dr. George P. Potekhen is a 1944 graduate of the New York Medical College. He has a National Board certificate and is licensed in New York, New Jersey, and Illinois. Dr. Potekhen is an anesthesiologist and

is currently in practice in Plainfield, New Jersey. He plans to locate in Greenwood in about six months.

Dr. Everett A. Woodworth graduated from the University of Buffalo School of Medicine in 1927. Dr. Woodworth is a surgeon and has practiced in Buffalo, New York, for the past 34 years. He plans to move to Myrtle Beach in about a year.

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### Physicians Honored by Columbia Medical Society

The Columbia Medical Society, at its June meeting, honored four physicians, including one who has died since receiving the honor.

The physicians received gold pins for serving more than 50 years as physicians in South Carolina.

Dr. W. A. Boyd, who died June 28, was among those honored. Dr. Boyd began his medical service to the people of South Carolina in 1904.

The other physicians were: Dr. Jane B. Guignard, who has been in the practice of medicine since 1905; Dr. W. E. Fulmer, who has practiced since 1908; and Dr. William Weston, Sr., who began his medical service to the people of South Carolina in the year 1897.

Dr. Weston C. Cook, President of the Columbia Medical Society, presented the pins, stating that he did so with a deep sense of humility, pride and appreciation for the many years of medical service these doctors have rendered to the people of South Carolina, concluding his remarks with, "We are proud to follow in your medical footsteps".

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Richard W. Hanckel, M. D., who was named Chairman of the Department of Otolaryngology of the South Carolina Medical College in July 1960 is now full time professor of otolaryngology there. Dr. Hanckel was graduated from the College in 1935 and since 1941 has been practicing his specialty in his home town of Charleston. He is a Fellow of the American College of Surgeons and the American Academy of Ophthalmology and Otolaryngology and is certified by the American Board of Otolaryngology.

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Dr. Roland W. Penick, a 1949 graduate of the Medical College of Georgia who has been affiliated with the Christie Pediatric Group in Greenville, became National Medical Director of the Pet Milk Company on July 1.

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### DR. MELLETTE TO HEAD MENTAL HEALTH CLINIC

Dr. Russell Ramsey Mellette has become director of the Charleston County Mental Health Clinic the second time.

After two years at the clinic, from 1958-60, Dr. Mellette became associated with the Chapel Hill Department of Child Psychiatry. He will still be commuting to Chapel Hill three days per week.

He is scheduled to work at the clinic here two days per week. Dr. W. C. Miller, who took over the direc-

tion of the clinic in 1960, resigned to accept a position on the staff of the Medical College.

Dr. Mellette, a native of Orangeburg, is a graduate of Clemson College and the Medical College of South Carolina. He also received training in child psychiatry at the Neuro-Psychiatric Institute of University Hospital, Ann Arbor, Michigan.

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### FIRST PHYSICIANS APPOINTED TO YORK COUNTY HOSPITAL BOARD

York County Hospital's board of trustees now includes two doctors—the first physicians ever named to the board.

Two Rock Hill physicians, Dr. Roderick Maedonald and Dr. W. H. Williams, Jr., have been appointed to the board by the county legislative delegation.

They were recommended for appointment by the Medical Society of York County, as provided in a legislative act passed by the S. C. General Assembly in May. Williams currently is president of the county medical society.

Maedonald's term runs until December 31, 1963. Williams' term expires December 31, 1965.

The appointments increase the size of the board from 12 members to 14.

Many area physicians reportedly have felt for some time that doctors should have some representation on the hospital board. The board, made up entirely of laymen in the past, has opposed such a move. One basis of the opposition was a feeling that medical and administrative affairs of the hospital should be kept separate. The board determines hospital policies, oversees business operations and hires key administrative personnel.

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### TECHNOLOGISTS

Furman University and Greenville General Hospital have collaborated to provide a special program which would qualify college students to become medical technologists. It will begin with the 1961-62 term.

The program requires three years of study at Furman toward the bachelor of science degree and 12 months of technical experience and formal classwork in the departments of clinical laboratories of the hospital.

Glenn E. Pottz, microbiologist and administrator of the laboratory at the hospital, announced the new training program. He said that registration as a medical technologist requires three years of college training in an approved college or university in addition to one year's study at a school approved by the American Association of Clinical Pathologists.

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### DR. DURST, TRUSTEE

The Pinehaven Hospital Board of Trustees has elected Dr. George Durst permanent chairman of the group.

Dr. Durst had been elected temporary chairman at an earlier meeting of the new board.

The board members also elected L. A. R. Nelson to be vice chairman.



Two resolutions were adopted by the board commending the retiring Managing Board of Pinehaven Hospital and its staff and employees.

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#### CD MEDICAL SERVICE GROUP MEETS

A Civil Defense emergency 200-bed hospital was discussed at a meeting of the Emergency Medical Service personnel of the Rock Hill Civil Defense organization June 6. The meeting was held at the residence of Dr. Robert Sumner.

Dr. Alton Brown spoke on the organization of the Emergency Medical Service and on "Management and Care of Mass Casualties in Peace and War." Arthur Roberts, Jr., Director of Rock Hill's Civil Preparedness program spoke briefly concerning the "General Survival and Preparedness" plan and what had been done in the way of organization of this program. Also discussed were refresher courses for nurses and corpsmen and the need for additional trained first aid personnel.

Attending the meeting in addition to Drs. Brown and Sumner were Dr. Frank Kiser, deputy chief of this service, Mrs. George Gin, Jr. and Mrs. Robert Sumner, supervisors of nurses for the emergency Medical Service, York County Hospital operating room supervisors, 20 unit supervisors and assistant supervisors and Cecil King, assistant supervisor of corpsmen.

It was decided that later in the year a meeting of all nurses in York County would be held, when a briefing session covering the Civil Preparedness program will be held, a training film shown and if possible a 200 bed emergency hospital will be open for inspection and training purposes.

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Dr. Margaret Shelton announces the opening of her office for the practice of medicine at 741 Folly Road, Charleston.

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Dr. D. O. Rhame of Columbia was recently inducted into the International College of Surgeons in Chicago.

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Capt. Daniel W. Boone assumed command of the Charleston Naval Hospital on June 30, where he was currently serving as executive officer of the hospital and chief of surgery. He succeeded Capt. Murphy K. Cureton who had been in Charleston for a year and a half and who has now retired after 30 years of service in the Navy.

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Capt. John I. F. Knud-Hansen is being transferred from the Naval Hospital at Annapolis to serve as chief of surgery at the Charleston facility.

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Dr. T. C. Nations of Anderson Memorial Hospital has joined the staff of Oconee Memorial Hospital at Walhalla to give pathological services there four days a week. He will supervise laboratory work and give consultations concerning pathological cases.

Dr. Donald Hiers, a native of Hampton who has been a general practitioner in Branchville for the last eight years, is now teaching in the department of neurology at the Medical College of South Carolina. Dr. Hiers was graduated from the Bowman-Gray Medical College and interned in Wisconsin.

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#### PEE DEE TB SANATORIUM WILL CLOSE

The million dollar Florence-Darlington Tuberculosis Sanatorium, in operation near Florence since 1930 closed July 1. All patients who could not be discharged were transferred to the S. C. Sanatorium at Columbia. Just what use of the valuable property will be made is not known. Suggestions are that it be used as an area tuberculosis sanatorium supported by other Pee Dee counties besides Florence and Darlington; that it be turned over to the state to be operated as an area sanatorium; that unused space for Florence-Darlington TB patients be used for treatment of other diseases such as cancer. The legislative delegations, governing boards and health officers of Florence and Darlington Counties are concerned with investigations which will lead to recommendations for use of the property.

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Dr. Horace M. Whitworth has been recognized for his 10 years of service as medical advisor to the Greenville County Selective Service Board. Vance E. Edwards, board chairman, recently presented to the physician a 10-year certificate signed by former President Eisenhower; Gen. Lewis B. Hershey, national Selective Service director; Gov. Ernest F. Hollings; and Col. Donald H. Collins, state Selective Service director.

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According to a newspaper article the recent United Cerebral Palsy Fund Drive in Charleston netted \$6,300. Of this \$1,575 will go to the United Cerebral Palsy national organization, \$2,000 will be used to defray the expenses of the local campaign and the balance of \$2,725, less than half of what was collected, will be sent to the state organization to be used in the statewide program.

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#### DR. SIEGLING ELECTED HEAD OF BLUE SHIELD

A Charleston physician, Dr. John A. Siegling, was elected president of the South Carolina Medical Care Plan (Blue Shield) recently at a meeting of the board of directors in Columbia.

Dr. George Dean Johnson of Spartanburg is the outgoing president.

Dr. R. Cathcart Smith of Conway was elected vice president, the office formerly held by Dr. Seigling.

Other officers of the Blue Shield Plan are Dr. Charles J. Lemmon, Jr., of Columbia, secretary and Thomas C. Vandiver, vice president of the South Carolina National Bank in Columbia, treasurer.

Dr. Luther M. Mace of Barnwell was elected to the board.

# Announcements

## **SOUTH CAROLINA PEDIATRIC SOCIETY**

Joint Meeting with Columbia Medical Society

Monday Evening, September 11, 1961

Annual Scientific Session—September 12, 1961

Tentative Program

Dr. R. W. Paul Mellish, of Children's Hospital, Philadelphia, on subjects not yet selected.

Dr. Daniel Stowens of the Children's Hospital, Louisville, Ky., will speak on "Liver disease in infancy" and "New concepts in leukemia".

Two local speakers will also present papers.

## **THE AMERICAN COLLEGE OF PHYSICIANS**

COURSE NO. 2, THE PHYSIOLOGIC BASIS OF INTERNAL MEDICINE, Duke University Medical Center, Durham, N. C.; Eugene A. Stead, Jr., M. D., F.A.C.P., and Elbert L. Persons, M.D., F.A.C.P., Co-Directors; Oct 9-13, 1961; Min. Registration, 60; Max. Registration, 95.

This course will deal with recent progress in understanding, diagnosis and treatment of disease in the major areas of internal medicine. Emphasis will be placed on the physiological mechanisms underlying the disease processes.

## **SOUTH CAROLINA ORTHOPAEDIC ASSOCIATION**

**September 15, 1961 - September 17, 1961**

**Annual Meeting**

William Hilton Inn, Hilton Head Island, S. C.

September 15, 1961

Dr. John Arthur Siegling, President, presiding

2:00 p. m.—Coxa Vara—Dr. John A. Siegling and Dr. Hiram B. Morgan

3:00 p. m.—Some Curious Soft Tissue Tumors—Dr. H. R. Pratt-Thomas

3:30 p. m.—Regional vs. General Anaesthesia in the Orthopaedic Practice—Dr. John E. Mahaffey

4:00 p. m.—Prevention of Delayed Union or Non-Union in the Treatment of Fractures—Dr. Edward Compere

September 16, 1961

9:00 a. m.—Dise Protrusion and Unstable Spine Fusion with the Multiprop Bone Graft—Dr. Austin T. Moore

10:00 a. m.—Post-operative Thrombophlebitis—Dr. J. Manly Stallworth

10:30 a. m.—Finger Joint Prosthesis in Rheumatoid Arthritis—Dr. Waldo Floyd

11:00 a. m.—Errors and Safeguards in Orthopaedic Surgery—Dr. Edward Compere

September 17, 1961

10:00 a. m.—BUSINESS MEETING

Evening—BANQUET

## **THIRTEENTH POSTGRADUATE ASSEMBLY IN ENDOCRINOLOGY AND METABOLISM**

Under the Co-Sponsorship of The Endocrine Society and The National Institutes of Health

Bethesda, Maryland

October 2-6, 1961

A comprehensive review of clinical endocrine problems and current research activity in these areas will be presented. For further information, write to: Dr. Roy Hertz, National Institutes of Health, Building 10, Bethesda 14, Maryland. The fee will be \$100.00 for physicians, with a reduction to \$30.00 for Residents and Fellows. Enrollment limited to 100.

## **SOUTH CAROLINA CHAPTER, A.A.G.P.**

**13th ANNUAL MEETING**

**CLEMSON HOUSE, CLEMSON, S. C.**

**OCTOBER 12-13, 1961**

### **SPEAKERS**

C. Knight Aldrich, M. D.

Psychiatrist, University of Chicago

Floyd C. Bratt, M. D.

President, A.A.G.P., Rochester, N. Y.

John Cuttino, M. D.

Faculty, Medical College of S. C.

E. J. Dennis, M. D.

OB-Gyn, Medical College of S. C.

Thomas Fulghum, M. D.

Alcoholics Anonymous, Tidewater,

Augusta, Georgia

David B. Gregg, M. D.

Pinehaven, Medical College of S. C.

Julian P. Price, M. D.

Chm. Board Trustees, A.M.A., Florence, S. C.

Robert A. Ross, M. D.

OB-Gyn, Univ. of N. C., Chapel Hill

Harry C. Shirkey, M. D.

Pediatrics, Medical College of Alabama,

Birmingham, Alabama

## **UROLOGY AWARD**

*Urology Award*—The American Urological Association offers an annual award of \$1000 (first prize of \$500, second prize \$300, and third prize \$200) for essays on the result of some clinical or laboratory research in Urology. Competition is limited to Urologists who have been graduated not more than ten years, and to hospital internes and residents doing clinical or laboratory research work in Urology. Animal research is not necessary.

For full particulars write the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore 1, Maryland. Essays must be in his hands before November 15, 1961.

**NATIONAL SOCIETY FOR CRIPPLED  
CHILDREN AND ADULTS**

Annual Convention—November 17-21, 1961  
Denver-Hilton Hotel                      Denver, Colorado

**SOUTHERN MEDICAL ASSOCIATION**

55th Annual Meeting  
November 6-9, 1961 — Dallas, Texas

**1961 SCIENTIFIC SESSION  
AMERICAN CANCER SOCIETY**

Biltmore Hotel  
New York City, N. Y.  
October 23-24, 1961

**TOPIC: THE PHYSICIAN AND THE TOTAL CARE  
OF THE CANCER PATIENT.**

For further information write:

Professional Education Section  
American Cancer Society  
521 West 57th Street  
New York 19, N. Y.

**AMERICAN HEART ASSOCIATION**

1961 Annual Meeting and Scientific Sessions  
Bal Harbour, Miami Beach, Fla.    October 20-22  
For further information write the S. C. Heart Association Inc., 1200 Henderson Street, Columbia, S. C.

THE AMERICAN FRACTURE ASSOCIATION  
will meet September 16 through September 23, 1961,  
at the Shoreham Hotel, Washington, D. C. Its general  
sessions are acceptable for Category 2 by the AACP  
and the post graduate course at Georgetown

University Medical Center on Sunday, September 17,  
is acceptable for Category 1 by the AACP.

**International Symposium on Problems of the  
World's Children**

**Duke University — October 4-8**

Announcement has been received of a symposium  
entitled "The Commonwealth of Children" which will  
be held at Duke University on October 4-8. Fourteen  
committees composed of Duke faculty members,  
officials, trustees and friends of the University are  
developing plans for the symposium which were con-  
ceived as a tribute to Dr. Wilburt C. Davison, inter-  
nationally known medical educator and pediatrician,  
who directed establishment of the Duke University  
School of Medicine and served as its dean from 1927  
until he relinquished that position last year.

Dr. Davison has advanced the welfare of children  
throughout our country and has inspired countless  
people with his compassion, ideals and standards of  
excellence. In planning the Symposium it was felt that  
no higher honor could be paid Dr. Davison than a  
demonstration that others would attempt to carry on  
his work to bring healthier lives and a better world  
to children everywhere.

The Symposium program will be built around half-  
day sessions on problems in education and culture,  
population and economics, and health and social struc-  
ture. All these areas will be dealt with by experts  
brought together for the Symposium and each topic  
will be considered in its relationship to the welfare of  
the world's children. The program is being planned for  
a general rather than a specialized audience and all  
major sessions will be open to the public.

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**PIEDMONT POST-GRADUATE CLINICAL ASSEMBLY**

September 6 - 7, 1961

Clemson House

Clemson, S. C.

**Tentative Program**

Amos R. Koontz, M. D.—The Problem of Recurrent Hernia  
The Crumbling World and the U. S. A.

Allen M. Butler, M. D.—Parental Fluid Therapy in Diabetic Ketoacidosis  
Simplification in Estimating Drug Dosage and Fluid Allowances in  
Patients of Varying Sizes

E. C. Hamblen, M. D.—Osteoporosis  
Use of the Newer Progestogens

R. Lee Sanders, M. D.—Rose Ramer Cancer Lecture



CARELESS DRYING OF THE HANDS  
A POSSIBLE SOURCE OF CONTAMINATION  
A Proposed Method

WM. H. PRIOLEAU, CHARLESTON, S. C.



FIG 1 INCORRECT. SLEEVES LONG AND WET; TOWEL TOUCHING SHIRT FRONT.



FIG 2 INCORRECT. THE HANDS MAY BE SUBJECTED TO CONTAMINATION BY WATER FROM ABOVE THE ELBOW PASSING THROUGH THE FOLDED TOWEL, AS DEMONSTRATED BY COLORING THE WATER WITH DYE.



FIG 3 CORRECT. WITH THE TOWEL GATHERED TOGETHER, BOTH HANDS AND THE DISTAL 2/3 OF THE FOREARMS ARE DRIED.



FIG 4 CORRECT. CARE OF THE ELBOWS. THE TOWEL BALL IS HELD ON ONE SURFACE AND THE ELBOWS ARE MOOPED WITH THE OPPOSITE SURFACE.

ALTERNATE METHOD. THE TOWEL IS NOT USED. DRYING IS BY DRIPPING AND EVAPORATION.

Adapted from an Article in *Surgery* 48:417—Aug. 1960.

# Deaths

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## DR. W. A. BOYD

Dr. William Augustus Boyd, 80, a pioneer of orthopedic surgery in South Carolina, died at Columbia Hospital after a brief illness on June 28.

Dr. Boyd began private practice in Columbia in 1904. He served as city health officer, president of the Columbia Medical Society and was a former vice president of the South Carolina Medical Association. He organized the Crippled Children's Clinic at Columbia Hospital in 1920. He was a former president of the Southern, Seaboard Railway and Atlantic Coast Line Surgeons Associations.

Dr. Boyd was born in Charleston, March 19, 1879. He graduated from Charleston High School, the College of Charleston, Philadelphia School of Anatomy and the University of Pennsylvania Medical School.

## DR. S. R. GREEN

Dr. Seibels R. Green died in Orangeburg Regional Hospital in June after an extended illness.

Dr. Green was born in Columbia November 5, 1886, and practiced medicine in Orangeburg 46 years. He received his early training at Allen University in Columbia, his college training at Lincoln University, Pa., and his medical training at Meharry Medical College, Nashville. He was a member of the South Carolina Medical Association.

## DR. C. P. CORN

Dr. Charles P. Corn, 76, of 203 E. Main St., Walhalla, retired dermatologist, died in an Atlanta, Ga., hospital on June 5.

Dr. Corn practiced dermatology in Greenville for 36 years before retiring in 1958 and moving to Walhalla.

He received his M. D. degree from the University of Georgia Medical College at Augusta in 1911. He interned at Augusta City Hospital, after which he practiced medicine in Johnston 11 years. He then did post-graduate work at New York Post-Graduate School of Medicine, specializing in dermatology, and later spent three months in various European skin clinics. He went to Greenville in 1922.

Dr. Corn was an honorary member of the American Academy of Dermatology, the American Medical Association, the Southern Medical Association, the South Carolina Medical Association and the Greenville County Medical Society.

He had served as vice president of the Greenville County Medical Society, president of the Greenville General Hospital Staff, and vice president of St. Francis Hospital Staff.

## DR. THADDEUS J. INABINET

Dr. Thaddeus Julian Inabinet, 38, a leading physician and chief surgeon at the Chesterfield County Memorial Hospital, died in Charlotte on July 13.

He received his medical training at the Medical College of S. C. in Charleston and in residency and internship at Columbia Hospital in Columbia.

He served in the Medical Corps, U. S. Army, during the Korean conflict and in medical school served in the Navy for 2½ years. Eleven years ago he was married to Miss Martha Oliphant.

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## THE MONTH IN WASHINGTON REGULATION OF DRUGS

The American Medical Association opposed three major provisions of a bill (S. 1552) that would greatly increase the powers of the federal government in regulation of the ethical drug industry.

These three provisions would turn over to the Department of Health, Education and Welfare and the Food and Drug Administration the responsibility for (1) relaying of drug information to physicians, (2) selecting the names of new drugs, and (3) deciding whether a drug is of value in treating human ills.

The A. M. A. didn't take a position on the bill as a whole because certain of its provisions, "such as the Sherman Act and patent law amendments, are outside our area of competence."

Dr. Hugh H. Hussey, Jr., Chairman of the A. M. A.'s Board of Trustees and Dean of Georgetown University (Washington, D. C.) School of Medicine, was the

chief A. M. A. witness at the opening of hearings on the legislation before the Senate Antitrust and Monopoly Subcommittee headed by Sen. Estes Kefauver (D., Tenn.). Dr. Hussey was accompanied by Dr. Ernest B. Howard, Assistant Executive Vice President of A. M. A., and C. Joseph Stetler, A. M. A.'s General Counsel.

With Congress trying for adjournment by about Sept. 1 and much "must" legislation still to be acted upon, it appeared highly unlikely that Congress would complete action on the drug legislation this year.

Dr. Hussey reviewed for the subcommittee A. M. A.'s 70-year-record of taking lead in endorsing legislation designed to insure the purity of drugs and food. The A. M. A. carried on intensive legislative efforts in the field and "is generally credited with being one of the major forces that brought the first Pure Food and Drug Act into being" in 1906, Dr. Hussey said.

Dr. Hussey cited these A. M. A. aims that "we, as physicians, are desirous of achieving:

"—We want all physicians to be well-trained and fully informed on all aspects of the practice of medicine.

"—We want this body of knowledge and reservoir of skills to include a high degree of competence in the selection and proper use of drugs.

"—We want a continuing and expanding flow of useful drug products placed at the disposal of these physicians."

Dr. Hussey pointed out that the A. M. A. already conducts an intensive program of informing physicians about new drugs and that this program is now in process of being greatly stepped up.

"The medical profession believes that the education of physicians is the responsibility and prerogative of the profession itself," he said.

Assigning responsibility for selecting names of new drugs to the federal government would merely be duplication of the program of drug nomenclature which has been operated for many years by the A. M. A. and the pharmaceutical industry, Dr. Hussey declared. This program also has recently been refined and improved, and will continue to meet the need for an orderly system for selecting names for new drugs.

In the final analysis, it is the physician and the pharmacist who must know the non-proprietary names of drugs, he said. These two professions now direct this naming process, and "we do not believe the re-

sponsibility for designating and revising names should be assigned to a governmental agency", he said.

Regarding determination of the efficacy of a new drug, Dr. Hussey said:

"We believe that only the physician has the knowledge, ability and responsibility to make a decision as to what drug is best for a particular patient. He should not be deprived of the use of drugs that he believes are medically indicated for his patient by a governmental ruling or decision.

"Physicians seek to treat the medical problems of *individual patients*. A physician does not treat ten cases of hypertension, he treats ten individual patients, each of whom has a medical problem he has diagnosed as hypertension. He may find that the same dosage of the same form of the same drug will be efficacious in each and all of his ten patients.

"Or he may find that one or more of them need different dosages, or different forms of this same drug. He may, indeed, find that one, two or three of them are allergic to the non-active ingredients used in this brand of the drug, and that a different brand, with other non-active ingredients, is the proper answer.

"Thus, in one patient, a specific dosage of a specific drug might be said to be efficacious. While in another, it would be described as totally ineffective.

"A physician can be told many things about a drug, including its chemistry, its mode of action and, to some extent, its toxic properties. But he must judge its efficacy."

## HILL-BURTON ACTIVITIES

Dr. Peebles, State Health Officer, announced in June that the State Board of Health, on the advice of its Hospital Advisory Council, had petitioned the U. S. Public Health Service to raise the federal share for Hill-Burton construction projects that are to be placed under contract during the next fiscal year from 50% to 66-2/3%. The new fiscal year begins July 1, 1961. He said that if the request is granted, projects whose federal shares have already been established by the U. S. Public Health Service and the state agency, by the execution of Part 4 of the project construction application, will not be affected.

Surgeon General Luther L. Terry wrote the state agency for Hill-Burton earlier in the year urging an acceleration of the program as an antirecessionary measure. The change in the federal participation is designed to accelerate the construction of much needed medical facilities in South Carolina. If construction is accelerated the economy presumably will be stimulated. From 1947-1961 over \$80.5 million has been spent in South Carolina for the construction of hospitals and medical facilities and nearly \$38 million of this amount took the form of Hill-Burton grant-in-aid federal funds.

The revised 1961-1962 State Plan for Hospital Construction in South Carolina has been submitted

to the U. S. Public Health Service for approval. The plan is prepared annually and the criteria used are prescribed by the Hill-Burton Act and regulations. The U. S. Public Health Service notified the South Carolina state agency earlier this year that for purposes of the new State Plan an estimated population figure of 2,329,000 was to be used. The 1960 U. S. Census count of 2,382,594 included military population and, by necessity, had to be reduced by 53,594. To accomplish this each of the six counties having military installations absorbed the deduction on a percentage of population basis.

The new State Plan allows a total of 10,634 general hospital beds for South Carolina which now has 6,914 existing "acceptable" beds or, in other words, 65.02 percent of the need has been met. Each of the 46 counties has been declared a hospital area and these areas have been further classified as Base, Intermediate or Rural. Beds have been assigned to the areas on the basis of 4.5 beds per thousand population for base areas; 4 beds per thousand population for intermediate areas; and 2.5 beds per thousand population for rural areas. Following this procedure South Carolina had left 1,657 unassigned beds and these beds have been assigned to areas on the basis of the state's buying power. The existing acceptable beds in each area were divided by the total beds

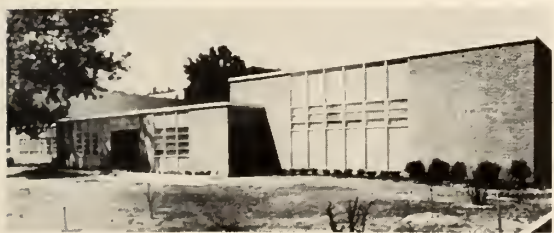


allowed the areas (counties) to determine the percentage of need met and the counties have been listed on the priority list in the order of their percentage of need met, those with the lowest percentage of need met receiving highest priority.

In the Mental Hospital section of the plan the need was determined on a basis of five (5) beds per 1000 population and using this criterion South Carolina needs a total of 11,645 mental hospital beds and currently has 2,359 existing "acceptable" beds. Dr. Peeples said that, in other words, 20.26 percent of the need has been met, and that our state legislature, realizing this need, has appropriated funds in the last session to allow construction for facilities supervised by the South Carolina Mental Health Commission. Dr. Peeples mentioned that in 1948 only one general hospital had a psychiatric unit, whereas, five now have these units and they are listed as follows: Anderson Memorial Hospital, Spartanburg General Hospital, South Carolina Baptist Hospital, Greenville General Hospital and the Medical College Hospital in Charleston.

The need for chronic disease facilities was determined on the basis of two beds per 1000 population. Using this criterion and an estimated civilian population of 2,329,000 the State of South Carolina has a need for 4,658 chronic disease beds. At the present time there are only 244 such beds in our state and Dr. Peeples said an additional 4,414 chronic disease beds are needed.

The need for Nursing Home facilities in South Carolina is tremendous and for purposes of the Nursing Home Section of the Revised 1961-1962 State Plan, the need for beds is determined on the basis of three per 1000 population. According to this criterion our state needs a total of 6,987 nursing home beds and at the present time there are 1,033 existing "acceptable" beds. 14.8 percent of the need has been met. Nursing home beds have been planned in each



*Richland County Public Health Center*—Opened in April 1960. Total project cost, \$255,721.99 and the Hill-Burton share was \$127,604.72.

Architect: Lafaye, Fair, Lafaye & Associates, Columbia, S. C.  
General Contractor: Atlantic Building Corporation, Columbia, S. C.  
Photograph by: E. S. Powell, S. C. State Board of Health.

of the counties on a 2.5 per 1000 population basis and the remaining 1,065 beds have been assigned as follows: 100 for a state cancer nursing home; 500 for nursing homes at the State Hospital; 100 for



*Cherokee County Memorial Hospital, Gaffney, S. C.*—A 104-bed general hospital constructed under the Hill-Burton Program (P. L. 725) and completed in 1956 at a total cost of \$1,207,624.49.

Architect: Walter Hook & Associates, Charlotte, N. C.  
General Contractor: T. C. Brittain Co., Decatur, Ga.  
Photograph by: E. S. Powell, S. C. State Board of Health.

South Carolina Convalescent Home for Crippled Children and the remaining 465 beds have been placed in a state pool to be assigned as needed. The above mentioned beds have only been put on the program and it is quite possible that future projects will develop in this needed area. Dr. Peeples reported that the agency has just concluded a survey of patients in nursing homes providing skilled nursing care, and the total occupancy was found to be 1451. The results of the survey showed that 43% of these patients were able to walk without assistance; 22% were able to walk with assistance and 35% were confined to wheelchairs or bedridden. Eighty-one percent of these patients were able to feed themselves and only 36% were able to dress themselves. Of these patients 67% were female and 33% were male. Ninety-one percent of the patients were over 60 years of age with 38% in the 76 to 85 age group and 19% in the 60 to 70 age group; 15% were over 85 years of age; 19% were 71 to 75 years of age and 9 percent were less than 60 years of age. The survey, according to Dr. Peeples, indicated that the services rendered these individuals ranged from catheterizations to oxygen therapy. Ninety-seven percent of these patients are residents of places in South Carolina and 29% of them are residents of the city in which the home is located. Thirty-one percent of these patients were from the same county and 37% from other counties in the state. Sixty percent of these patients were receiving welfare assistance and 52% of them had been in the nursing home for periods longer than one year. Of the 1451 patients in nursing homes in South Carolina 40% were reported to have been diagnosed as having arteriosclerosis; 36% senility; 21% paralysis and 3% miscellaneous. More than one diagnosis was reported for many of the patients and Dr. Peeples said that the percentages are indicative of the situation.

The tuberculosis hospital category of the new plan is much better since 83.5% of the state need has been met. The need for these facilities is determined on the basis of 1.5 times the average annual number of active

and probable active cases of tuberculosis found in the state during the latest two year period. Using this criterion 1,050 beds are needed and the state at present has 877 existing acceptable beds, therefore, only 173 additional beds could be constructed with the assistance of Hill-Burton funds. As a matter of information, the number of existing "acceptable" tuberculosis beds for South Carolina has not changed since 1958, but the percentage of need met has increased during this period from 62% to 83.5%. For this reason all additional allowable beds which could theoretically be constructed under the program have been placed in a state pool since no further tuberculosis hospital construction is anticipated.

Federal regulations allow one main public health center for each 30,000 of the state's population, hence South Carolina is allowed 77 such centers. Only one main public health center has been planned for each county. At the present time there are 37 existing

"acceptable" main health centers and 78 auxiliary health centers. Nine additional main health centers and 177 auxiliary health centers have been planned. Counties desiring to construct main health centers will be given priority over counties desiring to construct auxiliary health centers, and the latter can receive Hill-Burton assistance only if the auxiliary health centers are to be open for service each day the main health center is open.

South Carolina only has one suitable rehabilitation facility which is the South Carolina Alcoholic Rehabilitation and Treatment Center at Florence, S. C. This facility is now under construction. There are 52 "suitable" or "replaceable" diagnostic and treatment facilities in the state, whereas based on the state's population, 232 such units are needed.

A summary of the Revised 1961-1962 State Plan is as follows:

SUMMARY				
	Existing Acceptable (Beds)	Total Authorized Under Law (Beds)	Needed (Beds)	% Need Met
General	6,914	10,634	3,720	65.02
Chronic	244	4,658*	4,414*	5.20
Mental	2,359	11,645	9,286	20.26
TB	877	1,050	173	83.52
Nursing Home	1,033	6,987**	5,954**	14.78
	(Centers)	(Centers)	(Centers)	
Outpatient	52	232	180	22.41
Rehab.	1	8***	7***	12.50
Public Health Cen.				
Main	37	46***	9***	80.43
Aux.	78	244***	166***	31.97

\* 2 beds per 1,000  
\*\* 3 beds per 1,000  
\*\*\* Programmed.



*A little while ago we published the above collection of photographs with the request that anyone who could identify them would communicate with the editor. A number of letters were received, for which the editor is duly grateful. However, there was slight disagreement in some instances as to who was who, and one past president was not identified at all.*

*Our current list reads as follows: Top row (left to right) Dr. E. W. Pressly, Dr. Davis Furman, Dr. J. B. Black, Dr. Curran Earle, Dr. John Darby.*

*Lower Row (left to right) Dr. Crosson, Dr. J. L. Dawson, Dr. Neuffer, and last on the right Dr. Whaley. The photograph fourth from the left on the lower row has not yet been identified.*

*The editor would be happy to have any further comment or information.*

### **A Case of Societas ab Aequitate Dissentium**

*(Reprinted from Sonoma County Medical Bulletin)*

A young man lived with his parents in a public housing development. He attended public school, rode the free school bus, and participated in the free lunch program. He entered the army and upon discharge kept his national service life insurance. He then enrolled in the state university working part time for the state to supplement his GI check.

Upon graduation he married a public health nurse and bought a farm with an FHA loan, then obtained an RFC loan to go into business. A baby was born in the county hospital. He bought a ranch with the aid of a GI loan and obtained emergency feed from the government.

Later he put part of his land in the soil bank and the payments helped pay off his debts. His parents lived very comfortably on the ranch with their social security and old-age assistance checks.

The county agent showed him how to terrace it, then the government paid part of the cost of a pond

and stocked it with fish. The government guaranteed him a sale for his farm products.

Books from the public library were delivered to his door. He banked money which a government agency insured. His children grew up, entered public schools, ate free lunches, swam in public pools. The man owned an automobile so he favored the Federal-aid highway program.

He signed a petition seeking Federal assistance in developing an industrial project to help the economy of his area. He was a leader in obtaining the new Federal building, and went to Washington with a group to ask Congress to build a great dam costing millions so that area could get "cheap electricity."

Then, one day, he wrote his Congressman this letter of protest:

*"I wish to protest excessive government spending and high taxes. I believe in rugged individualism. I think people should stand on their own 2 feet without expecting handouts. I am opposed to all socialistic trends and I demand a return to the principles of our Constitution."*



# Book Reviews

*CARE OF THE WELL BABY*, Kenneth S. Shepard, M. D.: J. B. Lippincott Co., Philadelphia 1960. Price \$3.25 paper.

This book is apparently written (though I can find no actual statement of its purpose) for doctors who are confronted with the necessity of caring for infants and children, but who have not had formal modern well baby training and are not sure how to proceed.

Dr. Shepard stresses in many statements the great importance of good professional prophylactic well baby care.

Part One of the book is a series of thumbnail sketches which are mainly suggestions to the doctor about the professional conduct of interviews, examinations, and procedures, including immunizations for each scheduled contact between doctor and patient (and mother) from birth through the second year of life. The directions are given out in "cook book" fashion and present one man's technique. There are scattered and isolated facts about growth and development and other disconnected "pearls". The author urges the doctor throughout the book to smile at the baby and mother and to maintain an attitude of confidence and faith in the certainty of a successful ultimate development of the infant.

Part Two is entitled "Minor" and "Major" Problems. Several chapters have been contributed by Dr. Shepard's colleagues in the Northwestern University Medical School. This section, and also isolated inserts in the first section, consists of very brief, unsophisticated essays on common problems of office pediatrics, including dermatology, nutrition, colic, sleep, emotional problems, and training. A section on allergy lays the blame for most childhood ills, including growth failure, on allergy. There is a group of "Artefacts or Anomalies: Observations by the Plastic Surgeon", consisting of very sketchy presentations of several anomalies, with recommendations that are in many instances no longer valid by modern standards. There is also a very superficial section on orthopedics. Many points which are highly controversial are presented unilaterally and with no discussion.

Part Three describes techniques used in pediatric wards and nurseries of the Evanston Hospital. There are some good suggestions, but most of this material is not generally applicable.

The book can certainly serve a useful purpose and may be recommended for general practitioners and perhaps pediatricians who might wish some help in synoptic "little black book" form for general conduct of well baby care. Probably the ones who need this help most are least aware of this need. Those who tend to rely most heavily on it would probably be least aware of the shortcomings of the book, and least able to make a valid professional decision in the case which does not conform to the norm. It is my

feeling that many mothers do need guidance, but this must be based on firm knowledge and experience, and cannot be learned as Dr. Shepard recommends by a quick reference to the book while the mother waits in the examining room.

J. R. Paul, Jr., M. D.

*MANAGEMENT OF FRACTURES, DISLOCATIONS AND SPRAINS*. 7th ed. (Key and Conwell's). H. Earle Conwell, M. D., F.A.C.S. and Fred C. Reynolds, M. D., C. V. Mosby Company, St. Louis, 1961. Price: \$27.00.

It is fitting that Dr. Key's successor to the Chair of Orthopedic Surgery, Dr. Fred Reynolds, has participated as co-author in this important work.

For nearly 25 years this book has been, because of its completeness and conservative approach, the standard text in teaching as well as practice and it will in its new form, continue to be the *sine qua non* in the handling of fractures by the generalist, the surgeon and the orthopedist.

It is astonishing how much change there has been in the five years since the previous edition and the inclusion of new material brings the book entirely up to date. The extensive index makes it particularly important and gives easy access to the material.

As a definitive text in the handling of fractures, it is without peer.

John A. Siegling, M. D.

*SOMATIC TREATMENTS IN PSYCHIATRY*. Lothar B. Kalinowsky, M. D. and Paul H. Hoch, M. D. Grune and Stratton, New York 19. 346 pages, 1961. Price \$9.75.

This is the third edition of what is referred to in general psychiatry as the classic text book on the organic physiologic methods of treatment in psychiatry. The first book was published in 1946, the second in 1952, and this one in 1961. The general tone of the book is interesting, as compared to the other two, largely because of the fact that the authors feel that organic treatment, in general, has reached a point of at least relative completeness, in that an era of scientific research and neurophysiology has become a part of medical psychiatry, and is finally, to some degree, extruding itself from mere empiricism. About one third of the book is taken up with pharmacological therapy with a complete historical, descriptive, and clinical discussion of all the known "tranquilizers".

For the first time a very detailed description of the drugs is given, with particular reference to diagnostic and symptomatic classifications, so that out of the morass of drug classifications some relatively basic, simple principles can be applied in treating not only various types of psychiatric problems but various changing symptom pictures in each clinical case.

The same general approach is applied in discussion of convulsive therapy (ECT) insulin coma, and other methods, and psychosurgery (lobotomy). In all, a very excellent clinical differential is applied so the reader sees that serious attempts to be more clinically selective in treatment are now possible.

Finally, there is a discussion of a new inhalant type of convulsive drug called Indoklon. The authors are very much impressed with it because of its relative ease of use, the absence of fear on the part of the patient, the absence of post-convulsive forgetfulness. A much better state of well-being follows the drug treatment as compared with the electric treatment. The original difficulty in the treatment involved the use of a muscle relaxant, which is a respiratory paralyzer. This has been overcome in a simple way so that with Indoklon the drug itself and the muscle relaxant (both involving respiration) can be administered at the same time.

I feel that this book will be extremely useful to all practitioners of psychiatry because of its simplicity and its emphasis on the scientific selectivity of treatment.

Norton Williams, M. D.

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*METABOLIC EFFECTS OF ADRENAL HORMONES.* Ciba Foundation. Little, Brown and Company, Boston. 109 pp. 1960.

This conference report is in honor of Prof. G. W. Thorn, who was one of the participants in the study group. There is much authoritative discussion of the manner in which adrenal steroids affect various chain systems of enzymes and co-enzymes. As is readily acknowledged, however, the new knowledge has not produced a clear explanation of the manner in which adrenal steroids relieve the symptoms of rheumatoid diseases. Some bantering conversation is quoted bearing on the propriety of labelling as physiology or pharmacology the process of studying the actions of these endogenous agents. As with other volumes of this series, this is advanced and provocative treatment of a highly specialized interest.

R. P. Walton

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*THE HOUSE OF HEALING* by Mary Risley. Doubleday and Company, New York, 1961. \$4.50.

This is a straightforward account of the development of hospitals intended for reading by the public. It includes the story of hospitals from Sumerian and Babylonian times up until the present. The last chapter gives some brief discussion of the present day problems of hospital administration and support. Perhaps this pressing, almost desperate, problem might have been expounded a little more fully for the sake of our struggling hospitals of today.

J. I. W.

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*CLINICAL DISTURBANCES OF RENAL FUNCTION.* Abraham G. White, W. B. Saunders Company, Philadelphia, 1961, 468 pages. \$10.50.

The amount of information in this book is enormous.

White has taken the field of clinical renal disease and has applied the point of view of the physiologist toward analyzing the functional defects seen in a wide variety of syndromes. His approach is straightforward with a brief introductory statement about renal function. He then considers the disturbances seen in the classic primary renal diseases and hypertension. Finally, and in considerable detail, renal problems in obstetrics, urology, hepatic, cardiac, and endocrine disease are analyzed. The stress in the book is primarily on the kidney itself, and this is not another "salt and water" text on water balance of which there are already a great number in print. The text is full of useful diagrams and schematic presentations. It is not overloaded with tables, graphs, or references. Notes on the management of the various states are naturally included. The text is written for one who wishes to possess or already does possess considerable sophistication in the general field of pathologic physiology, for the heart, liver and endocrine organs cannot be neglected in such a book. As such, it will more probably appeal to the medical student, house officer, or physician interested in internal medicine or pediatrics than to those not concerned with the care of gravely ill medical patients.

Cheves McC. Smythe, M. D.

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*ATLAS OF OBSTETRIC TECHNIQUE.* By J. Robert Willson, M. D., Illustrated by Daisy Stillwell. The C. V. Mosby Co., St. Louis, 1961. \$14.50 de luxe edition, \$12.50 regular edition.

The reviewer as a rule does not like atlases. This is an exception. The introduction is succinct, pointing out that a good obstetrician is not necessarily the product of academic training, and clearly stating the basis of an organized obstetric service.

The technical discussions are basic and clear, and cover the field. Very honestly the author points out which procedures are technically difficult even though the drawings make them look simple. This is true of the descriptions of the Kielland forceps technique. It is to be regretted that the Barton forcep is not mentioned.

While the reviewer disagrees with some portions, especially on cesarian section, the atlas is highly recommended as a text for interns, residents, and especially as a ready reference for the general practitioner.

James Wilson

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*MEDICAL PHARMACOLOGY — Principles and Concepts.* By Andres Goth, M. D. C. V. Mosby Co., St. Louis, 1961. Price \$11.00.

This is an attractively styled volume which presents the current picture of drug therapy in the relatively brief space of 551 pages. Virtually all the representative type drugs of importance are included but the treatment deliberately avoids any appearance of a comprehensive listing of the multiple variants now being marketed. Emphasis is directed toward ex-

planations of mechanism and the result is unusually clear and stimulating. The author, an experienced teacher, makes a successful effort to present principles and concepts in a way which is understandable and which can be kept in perspective with the older background of drug therapy. Therapeutic empiricism is minimized despite the considerable number of current drugs whose promotion is based on empiricism to the point of mysticism. Typical of the newer drugs discussed are: triiodothyronine, guanethidine, erythropoietine, halothane and griseofulvin. Careful selection of material and a reliable viewpoint throughout means that students do not need to be protected from any part of this book and that anyone interested in the modus operandi of drug actions will find this a profitable though brief survey.

R. P. Walton, M. D.

*A MANUAL OF CUTANEOUS MEDICINE*, by Donald M. Pillsbury, M. D., Walter B. Shelley, M. D., and Albert M. Kligman, M. D., W. B. Saunders Company, Philadelphia and London, 1961, Pp 430. Price \$9.50.

This new book by Dr. Pillsbury *et al.* from the Department of Dermatology of the University of Pennsylvania is of manual size and format. In 1956 the same authors published a larger and more complete text of dermatology which was well received as the first large and completely new text in the field for many years. The authors state in the preface to this manual of cutaneous medicine that it is a précis of the larger text, but the same style and presentation is used.

The manual is about equally divided between graphic material and text. It does not include the rare diseases and is well designed for the student and general practitioner. Like the larger text the first chapters are a quick and lucid review of the basic sciences concerning the integumentary system, and bring into focus many new facts, especially in the fields of biochemistry. Like the larger text it does make some definite attempt to evaluate therapy which I think is

its most valuable asset over many other dermatological texts.

Kathleen A. Riley, M. D.

*CHINA DOCTOR*, The life story of Harry Willis Miller, by Raymond S. Moore. Harper and Brothers, New York, 1961. \$3.95.

This is a straightforward story of the life of Dr. Miller who accomplished many great things in the missionary field in China and elsewhere. Dr. Miller's efforts in building hospitals and carrying out other connected health measures were remarkably successful, and contact with some of the major figures of his time in China was probably responsible for this success. After a background of education at Battle Creek Dr. Miller went early into the Chinese field in 1903. He has been largely responsible for the development of soy beans as a source of acceptable human nutrition in countries where food is chronically scarce. At the age of 81 he has just begun a new hospital in Hongkong and an expanded nutritional program in the impoverished villages of Japan.

Dr. Miller's accomplishments are impressive, and the account is the picture of a remarkable life of service.

J.I.W.

*THE TREATMENT OF TROPICAL DISEASES* by W. H. Jopling. John Wright and Sons Ltd. Bristol 1960 — The Williams and Wilkins Co., Baltimore, exclusive U. S. agents. Price \$5.00.

This excellent handbook sticks close to its title and gives adequate detailed information on the treatment of various tropical diseases. There is occasional discussion of drugs under investigation and some comments in a few instances, but the book is essentially a manual of treatment and offers an excellent source of information. References are given to original articles, and discussion of drugs similar to those recommended is occasionally interpolated.

This would seem to be an excellent book for anyone dealing with tropical diseases.

J.I.W.

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## South Carolina and Mental Health

By Mrs. Alice W. Lovvorn

South Carolina's 1961 General Assembly provided thousands of dollars in additional funds for the state's mental health program and entered a new field by approving the establishment of a community mental health services project in which every county can participate on a matching funds basis.

A major disappointment, however, was the legislature's failure to authorize the establishment of a rehabilitation school for the mentally retarded. The special legislative-citizens' committee on mental health had concentrated on the problem of the mentally retarded during the previous year and recommended an initial appropriation of \$150,000 for the new center.

At the present time, South Carolina has no designated program for emotionally disturbed children requiring hospitalization. They must either be placed in the State Hospital or assigned to Whitten Village or Pineland, neither of which is primarily concerned with the problem, and all of which are overcrowded and have long waiting lists. Whitten Village is a home for white mentally retarded children at Clinton, South Carolina, and Pineland is a home for Negro mentally retarded children at Columbia.

The legislature did authorize, however, an appropriation of \$10,000 for the employment of a consultant in mental retardation to give emphasis to the problem under the supervision of the State Mental Health Commission.

The House of Representatives passed a bill providing \$150 per child to be reimbursed to school districts which have classes for trainable children and for the physically handicapped, but it did not gain Senate approval.

The community health services plan which was adopted by both House and Senate upon recommendation of the special committee would allow for: (1) the participation of all counties in mental health services (clinical, consultative and educational); (2) local control and initiation of services with state support; (3) grants to aid on a 50-50 basis; and, (4)

creation of regional community health boards with first, second and third year level of training. A year-for-year commitment will be required for such financial assistance.

The Senate passed legislation providing aid for salaries for psychologists employed by school districts, but it failed to win approval in the House of Representatives. This likewise was recommended by the special committee on mental health which found that only isolated school districts within the state now have budgeted positions for school psychologists. It administrative responsibility for mental health services within the region.

Other legislation adopted by the 1961 General Assembly included:

1. An appropriation of \$350,000 for the institution of a psychiatric residency program for the South Carolina State Hospital located in Columbia;
2. New statutes relating to the licensing and supervision of institutions for the alcoholic, epileptic, etc.;
3. An appropriation of \$15,000 for mental health research to be spent under the direction of the State Mental Health Commission; and,
4. An appropriation of \$30,000 to be used in a revolving fund for aid to psychiatric residents at the South Carolina Medical College at Charleston. The amounts will be \$5,000, \$6,000 and \$7,000 for the expressed the view that the demand would increase "significantly" in the next few years.

The committee reported that a recent survey conducted by the South Carolina Psychological Association revealed most school superintendents felt an immediate need for school psychologists and estimated that if funds were made available at least 90 full-time psychologists would be employed.

The Senate-approved measure concerning aid for school psychologists did not die with the 1961 session but can be revived in 1962 which is the second or "holdover" session of this General Assembly. The same is true in the case of the House-approved bill for aid to districts on a per-child basis for classes for the physically handicapped.

Newsletter from Southern Regional Education Board of July 3, 1961.

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According to the 1959 United Nations Demographic Yearbook, nine other countries reported lower infant mortality rates than the United States in 1958. They were: Sweden 15.8, Netherlands 17.2, Australia 20.5, Norway 20.5, Switzerland 22.2, United Kingdom 23.3, Denmark 23.4, New Zealand 23.4 and Finland 24.5.

Russia reported a rate of 81 in 1950 and 40.6 in 1957, latest year for which data were reported.



**LOSE WEIGHT AND LIVE** by Robert P. Goldman. Doubleday and Company Inc., Garden City 1961. \$3.95.

Among the numerous books which give advice in the matters of diet and weight reduction this seems to be an outstanding example. With due caution as to unnecessary extremes of diet, it gives a common sense approach to the matter of reducing weight by reducing food. It is pleasingly free of the elaborate tables, menus, calorie lists and the usual things that go into books of this type. The few simple lists seem to do all that is accomplished by more elaborate efforts.

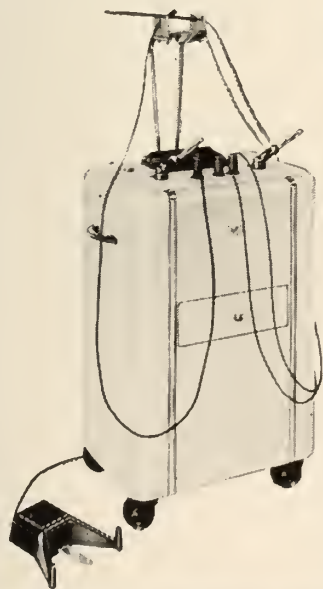
The dietary recommendations of this book have a very satisfying leaven of humor which makes comfortable reading.

J.I.W.

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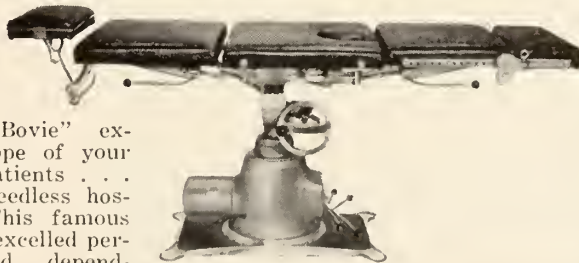


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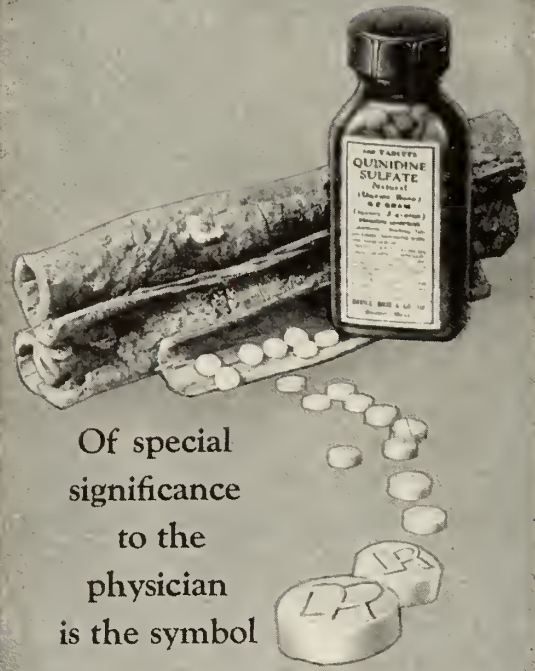


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# The Journal of the South Carolina Medical Association

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## A SUGGESTED MEDICAL ASSOCIATION SCHOOL HEALTH PROGRAM

DONALD A. DUKELOW, M. D.

*Consultant in Health and Fitness*

*American Medical Association*

*Chicago, Ill.*

The consternation that the words "school health" produce in a medical association causes me to wonder. It is interesting how these two simple words when used alone are so clearly understood, but when used together conjure all manner of concept ranging from additional duties that interfere with a physician's private practice to the usurpation of his practice by people employed by the school or the health department. In my 25 years of experience in various phases of public health administration, 12 of which have been on the staff of the American Medical Association, I have yet to see a school health program designed to take from the practicing physician the patients he is so interested in serving. In a few instances I have seen private physicians abdicate their responsibility to the children of the community, so that the health department or the school department had to take over the needed preventive and protective services. But even this is quite unusual.

In my comments today I want to do two things: first, to describe in rather elementary terms a basic program for the protection and promotion of the health of school-age children; and, second, to point up the role of the local medical society and its members who

are in private practice as it relates to this program. Since the school health program and the physician in private practice are inseparable, it will be difficult to describe them separately, so you are likely to find some of each in every paragraph.

### *A Basic School Health Program*

Sometime prior to 1940 the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association and the National Conference for Cooperation in Health Education developed what they called "Suggested School Health Policies." These were originally published about 1940 in both medical and educational journals and as a pamphlet in 1940 and in 1945. The third edition developed in 1956 has been reprinted several times. The first paragraph of the foreword of this document suggests a text for our remarks today:

"Every school has health policies, written or unwritten, consistent or inconsistent, in or out of tune and touch with the best informed professional opinion. These policies affect the present and future welfare of all school personnel, teachers as well as pupils."

*Suggested School Health Policies* then recommends six areas for the consideration of those involved with school health:

1. Provisions for Healthful School Living
2. School Health Education
3. School Health Services

4. Supervision of Health Aspects of Physical Education
5. A Health Program for the Handicapped
6. Determination of Qualifications for School Health Personnel

Physicians, both individually and collectively through their medical societies, can legitimately be concerned with each of these six areas. In none of them can either the physician or his medical society carry the sole and entire responsibility.

We are dealing with children of school age. They are minors. In our society the parent has the primary responsibility for the health and welfare of his child. That responsibility may be assumed by a voluntary or a governmental welfare program only when the parent will not or cannot assume that responsibility for himself. So we must consider the parent to be a part of this school health team.

The school, also, has a certain responsibility in relation to them. In this school, we find a group of persons highly trained in child observation, in the growth and development of children, in the emotional adjustments of children, and in the technics of teaching children and helping them to learn. These educators have an immediate interest in the health of the child. They may suspect, through their daily contact, health needs that could be overlooked by the physician who sees the child only occasionally or who may see him only during some acute illness which overshadows a developmental problem, an emotional problem or some other handicapping situation that is not readily obvious. These teachers also carry the burden of health education and physical education. It is obvious that they, too, must be a part of this health team, because they certainly have a fundamental interest in the health protection of the child.

When these children are not in school they are in the community, and are having contacts with all manner of community facilities and personnel ranging from their peers to the adults who serve them, and to their parents who provide them with the necessities of life. In this community we find all manner of agencies, both voluntary and governmental, which in some way touch upon all or part of this group. For example, the health depart-

ment serves all of them all the time and, in special circumstances, may have a peculiar responsibility which no other agency may bear. Some are clients of a welfare department. Others may be benefited by a crippled children's program, a mental health program or some other variety of community activity. It is not too remote to consider the influence on their lives of the sound teeth that result from the fluoridation of the community water supply, or in communities where it is needed, the universal use of iodized table salt, or the protection they receive from community-wide insect control, particularly mosquito abatement.

In the school are a number of adults. Some are on the faculty, some in administration, some conduct custodial services or serve as bus drivers, technologists, or in other specialized responsibility. The physical and emotional health of these adults is important, not only to the health and well-being of the children but to these adults themselves and to the families in which they live and to the community in which they serve.

In all of these situations, it is rather obvious that the medical association and the physician have a specific relationship to school-age children and the school in which they attain their education and spend half of their waking hours during half of the days in their year.

#### *Medical Society Responsibilities*

You are going to say at this point, "Yes, this seems very logical, very reasonable, but how does the busy private practitioner fit into this picture? What can the medical society do as a group? How do we keep the health department or the school from usurping the prerogatives of the private physician?"

I doubt very much if either the school or the health department wants to usurp the private physician's responsibility. If the practicing physician had a clearer concept of his role in community health he would be less fearful. Helping him understand that role is his medical society's responsibility. Probably those best informed about the physician's role in school health activities are the members of the school health committee of the state medical society and of the medical societies in the larger population centers. They should see that the phy-



sicians within their area of jurisdiction become informed about some of the trends in the school health program.

#### *Individual Physician's Problems*

First let's consider a few of the responsibilities of individual physicians. One of the great bones of contention is the immunization program. Whenever a health department administers a vaccination, a DPT shot or a dose of polio vaccine some physician in private practice becomes excited about the health department "taking over." In most of your communities the private physician has been given every opportunity to immunize the children and even the adults within his practice. It is only to carry out the health department's responsibility of maintaining a herd immunity adequate to the prevention of disease outbreaks that causes them to step in and fill the gap with immunization when unimmunized persons are found in the community. Physicians might help their school patients maintain a reasonable level of immunity against those conditions for which immunization is accepted practice, and then help plan community programs that will give this same protection to those who are not nominally the patients of private physicians.

Another example of a misunderstood practice is the so-called health examination or health appraisal. These are not synonymous. Health appraisal is a series of activities culminating in the medical examination and expression of judgment by the physician, with follow-up for care, if needed. Appraisal begins with teacher observation, with weighing and measuring, with screening of visual acuity and the testing of hearing by an audiometer. All of these bits of information noted on the school health record are ultimately transmitted to the physician who will do the examination. They give him information he could get in no other way. Ideally from both the medical and the education point of view, the medical portion of health appraisal should be performed by the child's own physician in his own office, with the school's records before him. When the doctor reports to the school, he should give the school some idea of the problems facing the child and the ways in which school personnel can help the physician insure the

maintenance of proper treatment, necessary restrictions, and the general supervision that leads to recovery. It is not necessary to give the school all of the detailed information used in arriving at a diagnosis. If it should happen that the child has no personal physician, it may be necessary for the school physician or medical advisor, or the health officer acting in that capacity, to make the examination and, on the basis of his recommendation, refer that child to a practicing physician or to a welfare department for needed therapy. How this works out in any community must be locally determined by the medical society, the health department, the school department and the welfare department in ways that meet the needs of the children and the customs of practice in that community.

A third illustration of interprofessional irritation is the so-called "excuse from gym." Physical education teachers become very irritated, and rightly so, with the physician who writes a blanket excuse for some apparently normal child that allows that child to escape physical education activities and the inevitable showering that follows. Though some of these excuses are legitimate, the physician has been pressured into writing most of them at the request of an over-protective parent or the parent of a girl who does not want to undo a carefully prepared hairdo by subjecting it to the damping effect of a shower. He is giving a medical excuse for a social situation. Where physicians and physical educators develop an understanding of the excuse problem the physical educator will usually be able to fulfill the physician's request for a specific degree of exercise or inactivity, or special exercises according to the needs of children who have problems. Interprofessional understanding leads to a mutual respect that avoids the blanket excuse for gym. This permits the physician to prescribe a very temporary relief from overactivity while a child is recovering from an acute illness, to be specific about the limited activity for those with a rheumatic heart or some other reason for limited activity, or even permits an occasional child to have bed rest in the health room during the time other children are physically active in the gymnasium. These types

of modified physical education are effective only when worked out in terms of mutual understanding among people who must deal with the same individual, the school child, who is of concern to all of them.

#### *Medical Association Problems*

In preparation for our National Conferences on Physicians and Schools, state medical associations are asked to report on the membership of their school health committees and on the school health activities that are carried out by the medical societies through its school health committee or some other committee related to school health. The variety of the response indicates a considerable ingenuity on the part of physicians in helping to promote the health of children in the schools. Without identifying the states involved I would like to suggest to you things that have been done by others with the hope that some of these may be possible activities for your committee and can be carried out in South Carolina.

Innumerable states conduct conferences such as we are having today, a few on an annual basis, most of them on a once in a while basis. One state has had nine state conferences since 1947. Some state medical associations collaborate with the large community medical societies within their state to develop regional conferences which serve a group of related counties with similar problems. A larger group of physicians can benefit from this because the shorter distances involved will permit many more who are busy to participate. A few county medical societies have had their own local Physicians and Schools Conferences contained entirely within their own community using their own resources and depending largely on local people for their program.

A number of medical societies report coordinating committees. Though the medical association does not "run" the coordinating committee's program, it often is instrumental in initiating this program. The coordinating committee, as a rule, includes the department of health, the department of education, the medical association, the dental association, the more prominent voluntary health agencies that are concerned with the health of school-age children, possibly the association of school

administrators and occasionally the welfare department. This can be done at the local level as well as at the state level, and has somewhat the earmarks of a school health council.

In one state every county medical society in the state appointed a man or a committee on school health. These individuals or committees function as medical advisors. It has been suggested to them that they form an interprofessional advisory committee similar to the one at the state level. One medical society has used *Suggested School Health Policies* as a guide to develop a workable set of policies. They are also defining the job of the school physician and his relationship to the private physician. Incidentally, this relationship was quite well defined in the report of the Second National Conference on Physicians and Schools in 1949 and the American School Health Association, through a committee of which I am chairman, has just published one report on school physician responsibilities in the *Journal of School Health* and another study on school physicians is in process. These might be helpful to you.

Medical societies of many states cooperate with the university and with departments of health and departments of education in the conduct of health education workshops during the summer. I have personally attended a number of these workshops and encountered one pattern which I would strongly recommend to you. Often workshops for teachers and school health personnel are conducted for university credit over periods of several days. In two states that I know of, the last day of this workshop was devoted to physicians. In the morning the physicians meet with the teachers on problems of common interest. In the afternoon the physicians, under physician leadership, discuss some of the health problems encountered in the school health program which are peculiar to their interests. These were not the clinical problems of medicine, but were the administrative problems of trying to coordinate medicine and education, the physician and the teacher, into an effective team. The terminal banquet was enjoyed by all. This idea of a "clinical pathological conference" on the administrative problems of school health I have found to be very helpful

and could well be a part of a school health conference sponsored by physicians. It helps settle the relative responsibilities among representatives of varying professions such as the physician, the dentist, the nurse, the psychologist, the audiometric technologist, the classroom teacher, the school administrator, the physical educator, and any others which might by chance come into the picture.

Several medical associations that publish journals have two or three articles regarding school health each year. The principal papers from a meeting such as this or papers on school health prepared by the committee or physicians in the school or health department who have first-hand knowledge of school health practice would be suitable.

At least one medical association is encouraging its local medical society to take the time to instruct teachers in how to observe children. Teacher observation is an important part of the screening program in the school health program and if teachers know what to look for and what behavior patterns or appearances are significant they are much more likely to refer these children through the family for medical supervision. Help on this can be obtained from the book, "School Health Services," published by the Joint Committee on Health Problems in Education; from their pamphlet on "Health Appraisal of School Children," and also from the writings of Dr. George Wheatley of the Metropolitan Life Insurance Company, who is the current president of the American Academy of Pediatrics.

One problem which often causes inter-professional misunderstanding is the pattern of referral. Medical societies working with the local school administration and the local health and welfare departments can work out a standard pattern for referral that fits their community so that the child gets to appropriate medical attention and the parents' prerogative is protected.

The patterns for conduct of screening programs and the standards to be used as the basis for referral are commonly agreed upon by a joint meeting of medical and education personnel. This is particularly important in regard to screening procedures for vision and hearing. In a rural state, where the services

of an ophthalmologist or otologist may not be readily available, it is sometimes difficult to know which physicians are equipped to perform the further studies required for the prescription of a hearing aid, or to know who are trained in refraction so that they may help children with visual problems. Only when this kind of a situation is resolved at the local level in an equitable and accepted way will it be possible to give all of the children the help that they may need.

Since injuries and sudden illness occur at the school, the medical society should work with the school administration to design mutually acceptable "standing orders" and patterns for their administration. School people should know what physician should be called for each child in case the parents are not available to assume their own responsibility for their own child. In some critical emergencies, one may not be able to wait for parents' permission or selection of a physician and a physician must be called as a lifesaving measure. In any instance, all teachers should have first aid training, or at least those engaged in the hazardous areas of the school, such as playground activities, the gymnasium, the sports program, the home economics department, the shops, the laboratories, etc. What is expected by physicians of teachers performing first aid, what parents should expect of teachers in the way of notification of injury or illness, and the manner in which physicians are called for emergency care should all be worked out in advance and agreed upon so that there is no question at the time of an emergency.

Closely related to this emergency situation is the problem associated with physical education and athletics. It is not unusual for children to be injured in contact sports. There should be a definite understanding between the physicians of a community, the schools, and the parents of the participating players about who should do what under any given set of circumstances. Also, there should be a definite understanding about the physician's responsibility for deciding when an injured player may return to play. This should not be left to the judgment of the coach or trainer whose primary interest occasionally is in win-



ning, even though he may have some interest in his players.

At least one state medical association supplies the school health committee of the county medical societies within the state with publications on school health, including those coming from the American Medical Association, from the Joint Committee on Health Problems in Education, and from a number of other sources as well as those which are published by the state medical association itself. This gives the school health committee the most recent information and supports them in their deliberations with education personnel.

Conferences on athletic injuries, symposia on sports medicine and clinics for coaches and trainers are becoming increasingly popular. These programs sponsored by medical societies promote the relationship between physicians and those responsible for the safety of children in the sports program.

The increasing demand for the teaching of mathematics and physical science has caused some schools to neglect or discontinue health education and physical education. A project of several medical societies is to impress on school administrators, curriculum coordinators and boards of education the vital need for education in healthful living and to use the resolutions on health and physical education of the A.M.A. House of Delegates as evidence of medical interest in these areas. In one state

this is done by medical society sponsorship of a school health conference for school administrators, in which the two groups can discuss their common interests at the professional level.

In cooperation with the Academies of Pediatrics and General Practice a few medical societies cooperatively established suggested minimum standards to guide physicians in the medical examination and supervision of school children, including standard report forms.

Adult health education to promote better understanding of the needed health and medical services for school-age children among parents, teachers and the professions is the project of one medical association. This is directed at the health program in private and church schools as well as in public schools.

This has been a rather rambling and disconnected series of examples and illustrations. Nevertheless, I have tried to give you a point of view. Medical associations, both at state and local level, have an obligation to keep their physicians informed on what is good school health practice. At the local level, medical societies and physician groups in communities within the area of their jurisdiction should be constantly in touch with the education personnel of the community and working with them in the interest of children. Only in this way can effective school health programs be conducted.

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*Substitute ileal ureter in an infant with congenital hydronephrosis of the left kidney and congenital cystic hypoplasia of the right kidney.* By K. M. Lynch, Jr. & R. R. Bradham (Charleston) *Surgery* 49:278, Feb. 1961.

The case of a child born with congenital cystic hypoplasia of the right kidney and ureter and congenital hydronephrosis of the left kidney is presented. Salvage of the markedly impaired left kidney was accomplished by substitution of an ileal segment for the stenotic left ureter. The case and technique of the operation are discussed in detail. This procedure, by eliminating the nephrostomy tube in the left kidney and adding the protective mechanism of peristalsis to eliminate stasis in the renal pelvis, should give maximum protection to the markedly impaired kidney. The future of this child is dependent on avoidance of any renal insult by infection or dehydration. It is the authors' belief that replacement of the ureter with a

segment of ileum is a sound procedure and should find application in cases in which a functioning kidney is present but compromised by an inadequately functioning ureter.

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*Practical experiences with therapy of barbituric acid poisoning*—J. Kniel. *Muenchen Med Wschr*—103:307 (Feb. 10) 1961.

In the last few years 225 patients with barbituric acid poisoning were treated by combined therapy which included careful nursing, exact control of autonomic functions, intensive measures against anoxia, shock, and infection, and extensive administration of antibiotics, strophantin, norepinephrine, cortisone derivatives, and methyl-ethyl-glutaric acid-imid (Eukraton). The mortality rate with this combined therapy was less than 1% and was, therefore, strikingly lower than that with all other methods of treatment reported up till now.

# INSTITUTIONAL CARE OF THE UNWED MOTHER

## AN ANALYSIS OF 222 PATIENTS

ERNEST H. BROWN, JR., M. D.

EDWARD J. DENNIS, M. D.

*Department of Obstetrics and Gynecology, The Medical College of South Carolina, Charleston, S. C.*

**T**he young mother with an illegitimate pregnancy poses an increasing problem in our present society. Institutions that provide adequate prenatal care and an organized program for rehabilitation are in great demand.

The following study was carried out in such an institution in order to determine first, the presence of any problems peculiar to the management of these patients and second, to observe a controlled group of young pregnant women under currently accepted methods of prenatal care and delivery.

### *Material*

During the period from July 1957 to July 1959, 222 mothers were admitted and delivered of 224 infants. The duration of pregnancy at the time of admission averaged 22 weeks. Patients were admitted from most of the states along the eastern seaboard with the vast majority from South Carolina and North Carolina.

A complete prenatal examination by the referring physician was required before the patient was accepted. Standard laboratory examinations such as serum tests, Rh factor, blood type, etc., were performed and any deficiencies were corrected shortly after admission. A chest x-ray film was deemed essential in view of the close association of the patients during their stay.

### *Prenatal Care*

It is necessary that all personnel involved in the operation of an institution of this sort establish certain, dedicated principles and philosophies, and that there be unanimity in acceptance and enforcement of these aims.

The administration of this institution was

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achieved through a board of directors selected from outstanding civic minded women in the community. In direct charge of the patients and the minute details of operation is the executive director selected by the Board. This individual determines the efficiency and success achieved by the institution.

Meticulous detail in insuring anonymity offered, at least initially, the most attractive inducement toward admission. This can be maintained in almost every instance even when the patient is admitted to a relatively large hospital. Selection of medical personnel, including medical students and student nurses, from a geographic origin remote to that of the patient was effectively accomplished, in this series.

The presence of a practicing obstetrician, as well as a resident at the weekly clinic and in selected instances in the hospital, created an added prestige and importance to the operation in the eyes of the dubious patient. Needless to say, it was excellent training for all involved.

An appeal for discipline and conformity to established doctrines of prenatal care could not be achieved by the emotional approach in this group. Rather, it had to be based on an expressed and explicit reasoning basis that was comprehended by staff and patient.

Spiritual needs could not be underestimated, and fundamental religious freedoms were not altered or revoked in any manner. A readily accessible place of worship as well as an intelligent specialized approach to instruction comprised an integral function in operational success.

Nursing staff was selected on the basis of proficiency in the profession as well as a sincere interest in the total patient problem. Around-the-clock coverage by nurses in ap-

propriate shifts provided a security of unquestionable importance to the patients. Those who, out of curiosity, delve into the origin of the patient's dilemma can quickly destroy the effectiveness of the institution, and should be replaced.

Careful selection of patients was impossible in most instances. This problem was resolved by quickly removing any patient who consistently interrupted the harmonious atmosphere of the other patients. An attempt to limit admission exclusively to the primagravidas would be inaccurate and unfair. Many deserving multigravidas would thereby be refused admission purely on a categorical basis, and many alleged primagravidas are actually multigravidas with well preserved-reproductive system appearance.

A carefully supervised program of baby sitting by the patients in selected homes allowed them the opportunity to observe a well integrated family group in operation. Many of them never knew such an institution existed.

Allocation of certain responsibilities of house-keeping on the basis of individual adaptability was essential to operation and important in eliminating idleness. Any attempt to do this on a basis of having the patient work for her keep was discouraged.

The presentation and demonstration of a proved and successful plan of prenatal care and delivery shortly after admission is most important. An avowed sincere interest on an individual basis of the total problem is equally important. The maintenance of a relaxed but organized atmosphere of individual cooperation served to promote and maintain discipline and efficiency. A plan of operation prepared under the direction of representatives from different fields eliminated some of the bias and projection characteristic of the human mind.

A Board consisting of an internist, psychiatrist, psychologist, registered nurse, dental surgeon, clergyman, social worker, accountant, hospital administrator, and obstetrician is of inestimable value in improving the scope and effectiveness of inpatient care as well as in follow-up, the latter being one of the most neglected phases of this type of program.

*General Considerations*

Careful attention to nutritional requirements is achieved through the efforts of a full time dietician. Particular attention is given to increasing the protein intake to 50 per cent over the ordinary requirements. Salt restriction is maintained in all patients and in those showing excess weight gain, rigid enforcement is provided by a separate diet table.

Vitamin supplements are available at each meal and ferrous gluconate is used to provide adequate amounts of iron.

*Antenatal Complications*

Toxemia of pregnancy, diagnosed according to standards adopted by the American Committee on Maternal Health in 1952, occurred in 3.6 per cent of the patients.

One of the patients classified as toxemia was a woman with known hypertensive disease of 16 years duration.

Average weight gain during the third trimester was 7.5 lbs. Total weight gain averaged 17.9 lbs. with variations from a loss of 16 lbs. to a gain of 43 lbs.

Diabetes, rheumatic heart disease, congenital heart disease, and other significant complications of pregnancy did not occur often enough to justify comment.

Oral diuretics were used freely and bed rest in the home was utilized for those demonstrating a lack of response to salt restriction and diuretics.

*Labor and Delivery*

Of 222 patients delivered, 175 were primagravidas and the others multigravidas of variable parity (Table I). A duration of labor of 12.4 hours in the primagravidas and 7.9 hours in the multigravidas in our series is accurate since the onset of labor was observed by professional personnel.

Table I  
AGE AND GRAVIDITY  
Age

Grav- idity	13-15	16-20	21-25	26-30	31 & Above	Totals
1	14	103	38	15	5	175
2	0	13	16	0	5	34
3	0	1	4	3	2	10
4	0	0	0	1	1	2
5	0	0	0	0	1	1
Total						222



Premature rupture of the fetal membranes occurred in 9 patients. When this occurred, the patient was immediately transferred to the hospital for sterile vaginal examination to rule out abnormal presentation or prolapse of the umbilical cord. All patients with these complications were delivered within 48 hours except one who delivered 6 days following rupture. Six of the 9 patients delivered premature infants.<sup>4</sup>

Our plan of premedication involved the use of meperidine and promethazine<sup>o</sup> administered intramuscularly, in varying doses. After a period of trial, 50 mg. (1 ml.) of meperidine combined with 50 mg. of promethazine was found to be the most effective in achieving adequate analgesia with the minimal depression to the infant.<sup>3, 4</sup> In the labor room and before transfer to the delivery rooms, trichloroethylene was offered to all patients to use if they desired.

Nitrous oxide and oxygen were used as the anesthetic agent for delivery in 188 patients. Cyclopropane was used as a supplement on 16 occasions. Saddleblock was utilized in 31 patients and continuous caudal anesthesia in 3 instances. Pudendal block with 1 per cent xylocaine was used in most instances with inhalation anesthesia.

Low forceps is our preferred method for delivery and was used in 149 deliveries (table II). On three occasions rotation for transverse arrest had to be done.

Midline episiotomies were used on 178 occasions with third degree extension occurring in 51, an extension rate of 28.6 per cent. Mediolateral episiotomy is preferred in large babies, small perineal bodies, or breech.

There were 3 cesarean sections performed, an incidence of 1.4 per cent. The indications for section were one previous section, another in a primagravida in early labor with a breech presentation and a compromise pelvis, and, another in a primagravida with uterine inertia, fetal distress, and a contracted pelvis.

Uterine inertia was encountered in 10 patients, 4 of whom should be classified as having secondary inertia. Dilute intravenous pito-

cin was effective in achieving delivery in all but one case, and was contraindicated here because of a contracted pelvis. Abruption placentae was found in 2 occasions and in both instances was found on examination of the placenta following an uncomplicated delivery.

*Infants*

There were 224 infants delivered including two sets of dizygotic twins. Prematurity was a complication on 21 occasions as was one immature delivery. There were 2 stillbirths and 3 neonatal deaths.

One stillborn was an immature infant delivered by pitocin induction following death of the fetus in utero in a 25 year old primagravida with juvenile diabetes. The other stillbirth occurred in a primagravida at term with breech presentation, prolapse of the umbilical cord following spontaneous rupture of the membranes, and death of the fetus before cesarean section could be performed.

Table II  
TYPE OF DELIVERY

Spontaneous	41
Low Forceps	149
Mid Forceps	16
High Forceps	0
Breech	15
Cesarean Sections	3
Episiotomies	
Midline	178
Third degree extensions	51
Mediolateral	28
None	16

One of the neonatal deaths was an assisted breech delivery of a 3 lb., 1 oz. infant in poor condition at birth who succumbed 12 hours following delivery. Another was a 3 lb., 3 oz. infant delivered as a second twin by low forceps, with death due to hyaline membrane disease 48 hours following delivery. The third neonatal death occurred in a 6 lb., 1 oz. infant with multiple congenital anomalies incompatible with life.

Since this study was also planned to evaluate dosage and administration of analgesics during labor, careful attention was paid to determination of the breathing and crying times. Within one minute after delivery 216 of the infants either breathed or cried. Five of the infants breathed within four minutes and, on 3 occasions, the time was greater than 4 minutes.

<sup>o</sup>Promethazine hydrochloride and meperidine hydrochloride available as Mepergan® from Wyeth Laboratories.

### *Postpartum Complications*

Puerperal endometritis occurred in 5 patients before discharge from the hospital, the average hospital stay being 3 days (table III).

Mastitis occurred in 2 patients and infections of the urinary tract in 5.

Bladder atony of a mild degree was a complication in 15 patients, 10 of these experiencing minor and 5 major difficulty.

Significant infection of an episiotomy occurred in one instance during hospitalization and this in a midline episiotomy without extension.

Table III  
COMPLICATIONS

Pre-eclampsia	7
Hypertensive vascular disease	1
Uterine inertia	10
Premature rupture of membranes	9
Abruptio placentae	2
Pyelonephritis	2
Cystitis	3
Mastitis	2
Puerperal endometritis	10
Bladder atony Mild	10
Severe	5
Total	61

### *Discussion*

The problems of indoctrinating these young mothers in a home for prenatal care and delivery are nonexistent when approached with an attitude of sincere kindness and understanding. Every effort is made to create a real sense of security since it is this trait that is notably absent in this group. As condemnation of the illegitimate pregnancy has been more than adequately performed by society, our goal is to relieve as much as possible the agony perpetuated by the ever present intra-uterine life continually reasserting its presence and with it the stigma of its existence.

Education of the patient in preparation for labor and delivery has received considerable attention both in the lay and medical press. A simple yet satisfactory philosophy would seem to be a transfer of confidence and security to her medical or professional attendants during the time of labor and delivery. This has been achieved in this group through a feeling of friendship and mutual understanding engendered by frequent clinic visits and attention to even the most minor complaints. A most effective means of preparation

has been free discussion, both among the parturient girls themselves, and also with those who return to the home for 2 weeks postpartum care prior to discharge.

The significantly lowered requirements of analgesic drugs in this series seems to illustrate two important points. First, adequate psychological preparation of a patient for labor decreases the need for the administration of large doses of drugs, and second, desired levels of sedation may be achieved by using compounds with proven synergistic effect thereby reducing the need for drugs known to depress the infant.

Promethazine was selected because of the notable infrequency of side effects associated with its administration over a broad area of experience. Initially, a dosage of promethazine 25 mg. and meperidine 25 mg. was used but this did not produce the desired levels of sedation. Increasing the dosage of promethazine and meperidine to 50 mg. each achieved satisfactory sedation without an appreciable change in effect on the infant.

After establishing what we found to be the optimum dosage, incorporation of the two drugs in a solution prepared in disposable sterile needle unit form<sup>o</sup> was made available for study. This proved superior since it facilitated administration as well as reducing total volume required.

The midline episiotomy was selected for use in order to confirm our impression that it produced less postpartum discomfort than other types.<sup>1</sup> We also believe that when properly repaired, detection of the episiotomy scar in later years is less likely to occur. This is understandably of great concern to the patient who we feel should be allowed the prerogative of divulging her past history. As noted, extension of the incision into the rectum denotes no increase in postpartum complications, and restricted diet, laxatives, and antibiotics are not required.

A cesarean section incidence of 1.4 per cent may seem somewhat low in view of the predominance of primagravidas in the group. However, a critical review showed no instances in which abdominal delivery should have been performed. Such an analysis is

<sup>o</sup>Mepergan Tubex, Wyeth Laboratories.

necessary to insure the fact that exaggerated conservatism does not exist as a result of conscious or subconscious effort to utilize cesarean section only as a last resort, since limitation of reproductivity as well as an abdominal scar would effect greater emotional trauma to these young mothers.

The 3.6 per cent incidence of toxemia in this group is reassuring in the sense that it reflects a definite decrease over the average in our geographic location. However, it is disturbing in the realization that it may well represent an irreducible minimum.<sup>1, 4, 5, 7, 9</sup>

It is important to note that even with an incidence of toxemia approaching 4 per cent, induction of labor because of increasing severity of the syndrome was indicated in only 2 patients.

Of equal significance is the notable absence of toxemia contributing to intra-uterine or perinatal fetal death.<sup>2</sup> Thus it would appear that careful control of early manifestations of the toxemic syndrome will in itself eliminate certain inherent dangers to the fetus and prevent the relative emergency created by increasing severity of the signs and symptoms in forcing delivery of the patient.

Acetazolamide and chlorothiazide were used frequently in correcting fluid retention and were found effective in most instances. Some

patients receiving chlorothiazide with restricted sodium intake complained of subjective symptoms suggestive of hyponatremia, and this was corrected by allowing a regular diet while on the drug.

This group emphasized the importance and value of bedrest in treating excess weight gain due to sodium and water retention. If an ambulatory patient on diuretics did not lose weight rapidly, she was put at bedrest for 48 hours and almost without exception showed a satisfactory response.

#### *Summary*

1. The unwed mother must have a place providing security, seclusion, understanding, and superior obstetrical care supported by the society which has to accept the responsibility for her dilemma.

2. Careful selection of analgesic drugs reduces the requirements of those known to depress the infant. Since our knowledge of the hazards created by decreased oxygenation to the infant is incomplete, our efforts must be directed toward prescribing the minimum amount necessary to provide comfort to the mother.

3. While toxemia may not be completely preventable, the maternal morbidity and fetal mortality can be reduced by following firmly established basic principles.

#### REFERENCES

1. Alexander, S. A., and Downs, J. T., III: Influence of weight gain on pregnancy. *Am. J. Obst. & Gynec.* 66:1161, 1953.
2. Caillouette, J. C., and Russell, K. P.: Factors related to stillbirths. *Obst. & Gynec.* 11:164, 1958.
3. Carey, C. M.: Effects of various types of analgesia and anesthesia on the newborn. *Illinois M. J.* 102:256, 1952.
4. Eastman, N. J.: *Williams' Obstetrics*, 11th ed. New York, Appleton-Century-Crofts, Inc., 1956.
5. Ferguson, J. H. and Miller, H. K.: Toxemia of pregnancy at the Charity Hospital in New Orleans. *Surg. Gynec. & Obst.* 101:257, 1955.
6. Fish, J. S., Bartholomew, R. A., Colvin, E. D., Grimes, W. H., Jr., Lester, W. M., and Galloway, W. H.: Premature labor and the ruptured marginal sinus. *South. M. J.* 51:1464, 1958.
7. Gemmell, A. A., Logan, W. P. D., and Benjamin, B.: The incidence of toxemia. *J. Obst. & Gynaec. Brit. Emp.* 61:458, 1954.
8. Lund, C. J.: The relation of inhalation analgesia & anesthesia to asphyxia neonatorum. *Am. J. Obst. & Gynec.* 43:365, 1942.
9. Nelson, T. R.: A clinical study of pre-eclampsia. *J. Obst. & Gynaec. Brit. Emp.* 62:48, 1955.



# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH

#### Quinidine Toxicity

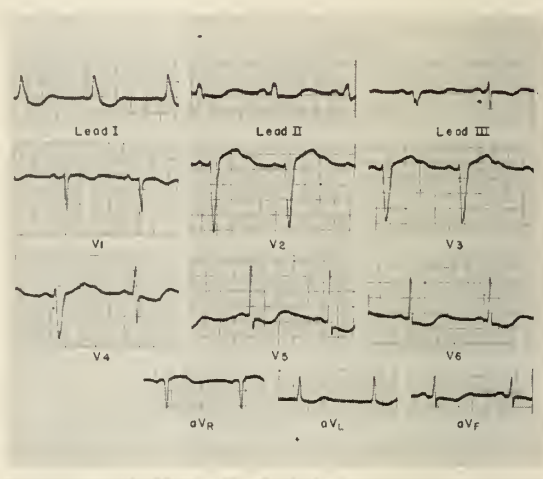
DALE GROOM, M. D.  
Department of Medicine

*Case Record*—A sixty-five year old lady was admitted to the hospital because of atrial fibrillation with a rapid ventricular rate and mild congestive failure. Its onset had been paroxysmal over the previous few months, the attacks often awakening her from sleep with orthopnea, weakness and a sensation of "fluttering" in the chest. Of note in her past history was treatment of hypothyroidism and, some two or three years prior to the onset of her cardiac arrhythmia, the onset of claudication and of typical angina pectoris.

Significant findings at the time of admission were a rapid and grossly irregular pulse, moderate obesity, occlusive arterial disease of both lower extremities, hypercholesterolemia and evidence of pulmonary congestion on auscultation and on the chest roentgenogram.

Because her atrial fibrillation was known to be of recent onset, a concerted attempt was made to restore a normal sinus rhythm. After digitalization which reduced the ventricular rate below 100, quinidine sulphate was given orally on a schedule of 200 mgm. every 2 hours for five doses without any symptoms of toxicity or change in the cardiac rhythm. The dosage was therefore increased on successive days to 300 mgm., then 400 mgm. every 2 hours when her pulse abruptly became regular and this electrocardiogram was recorded.

At this point the quinidine was decreased to a schedule of 300 mgm. every 4 hours day and night, adequate to maintain the regular sinus rhythm. Next day, however, the patient suddenly ceased to breathe, became pulseless, cyanotic and unresponsive. Almost immediately artificial respiration and external cardiac massage by rhythmic pressure on the sternum were begun and within a few minutes the patient was resuscitated. An electrocardiogram then showed atrial fibrillation with intermittent left bundle branch block, both of which persisted in all subsequent tracings. No further attempt was made to restore a sinus rhythm. The patient's recovery from this episode of cardiac arrest was uneventful and she was ultimately discharged from the hospital on a schedule of digitalis sufficient to maintain a reasonably slow rate of ventricular response and thereby control her symptoms of failure.



*Electrocardiogram*—A regular sinus rhythm is present at a rate of 60 with somewhat broad P waves and a P-R interval of 0.18. Width of the QRS complexes varies from 0.06 in those with normal ventricular conduction to 0.14 in the others which probably represent an intermittent bundle branch block, sometimes recurring on alternate beats. The S-T segments are depressed at least 1 mm. in the left precordial leads where the T waves are inverted. While the Q-T interval is prolonged in the beats with abnormal ventricular conduction (by approximately the amount that their QRS complexes are widened) the measurement appears to be within normal limits in the others although it is difficult to determine just where the T wave ends and the U wave begins.

The large U waves, especially conspicuous in V<sub>3</sub> and V<sub>4</sub>, are a prominent feature of the tracing.

*Discussion*—This case, perhaps more than the electrocardiogram, is representative of quinidine toxicity. Little can be said of the tracing except that it shows an intermittent intraventricular conduction defect of the left bundle branch block type and strikingly large U waves. The T and S-T changes are what one would expect in a patient receiving digitalis. Fortunately the patient survived what is usually a fatal complication owing to prompt institution of the recently popularized "closed chest" method of cardiac massage to maintain circulation and restore cardiac function following what was undoubtedly an episode of cardiac arrest.

Although quinidine has been used widely in the treatment of cardiac arrhythmias for more than a generation—mainly because of its principal actions of decreasing conductivity and irritability of the myocardium—considerable divergence of opinion still

exists as to its effects on the ECG as well as on the myocardium. For awhile the drug fell into disrepute and still is condemned by some as a "protoplasmic poison". Certainly its use in the treatment of ectopic arrhythmias and even as a prophylactic measure in acute myocardial infarction is attended by some hazard as this case illustrates. Such calculated risks can of course be greatly reduced by thoughtful observation of the patient and his electrocardiogram for indications of quinidine toxicity.

The "classical" ECG signs ascribed to quinidine are:

1. Prolongation of the Q-T interval—said to be the earliest and possibly the most consistent indication of quinidine effect. The same abnormality, one might recall, was described for hypokalemia until a few years ago when it was recognized that what was actually being measured was the Q-U interval, accentuation of the U wave being the real alteration caused by potassium deficiency.
2. Depression of S-T segments with flattening or inversion of T waves, not unlike those produced by digitalis.
3. Widening of QRS complexes—either because of depression of one or the other bundle branches giving rise to a bundle branch block, or by depression of the entire conduction network prolonging equally all portions of the QRS complex which consequently is of normal configuration except for the increased width. There is an old rule that one should use great caution in administering additional quinidine when the degree of widening reaches 25% of the width of the control QRS, and that a 50% increase is a mandate to stop the drug. From a practical standpoint, however, the degree of urgency of the situation sometimes weighs heavily in that decision.

4. Broadening and notching of P waves—due to further depression of atrial conduction and intra-atrial block.
5. Complete suppression of atrial activity with the emergence of a nodal rhythm or idioventricular rhythm or, if the depression is of sufficient degree that no area of the heart can take over the pacemaking role, cardiac arrest.

Not always does the patient experience the tinnitus, vertigo or nausea of cinchonism before ominous conduction abnormalities appear. As with digitalis therapy, the electrocardiogram may provide the first warning of impending disaster.

The large U waves are in all probability the prime warning of quinidine toxicity in this patient. They were not present before the drug was started nor after it was discontinued. Were it not for the fact that the intermittent bundle branch block persisted in tracings even two weeks later one might also attribute that to quinidine effect but a more likely cause here was the known coronary disease. Also the slowing of the rate to 60 is consistent with the depressant action of quinidine on the pacemaker. The much-feared complication of embolization—the dislodgment of thrombotic material from the atria when their fibrillation is abruptly supplanted by the normal mechanical contractions of a sinus rhythm—is actually a rare complication and was not a factor in this case. Just why the cardiac arrest did not occur until the day after restoration of a sinus rhythm when dosage of the medication had been reduced considerably is uncertain but it does suggest a more cumulative effect than one might expect with quinidine which is said to be quite rapidly excreted.

A helpful safeguard in quinidine therapy is that of retaining an electrocardiograph in the patient's room taking frequent strips of tracing as the dosage is increased to observe for signs of toxicity.

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*Parakeet as source of salmonellosis in man: Case Report*—D. Kaye, H. R. Shinefield, and E. W. Hook. *New Engl J Med*—264:868 (April 27) 1961.

A case of salmonellosis is reported in which a parakeet was the probable source of infection. *Salmonella typhimurium* was isolated from the stool of a 7-month-old infant with fever and diarrhea. Investigation of the patient's human contacts and food revealed no source of infection, but *Sal. typhimurium* was isolated from feces of a recently acquired parakeet. Bird droppings occasionally fell from the suspended cage to an area on the floor where the patient played. The bird feces contained 338,000 to 27,000,000 salmonellae per gram. No salmonellae could be isolated from air samples taken from the cage. Feces from 45 parakeets obtained from the wholesale supplier of the store from which the infected parakeet had been bought were negative for *Salmonella*. Further observa-

tions on the incidence of *Salmonella* infection in the parakeet would be of interest—there are about 15,000,000 parakeets in American homes today.

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*Spinal leptomeningeal ("Pial") lipoma: A case report* by O. R. Talbert and C. N. Simmons (Charleston). *Neurology* 11:645, (July 1961).

A case of leptomeningeal ("pial") lipoma in a seven months old negro infant is presented. The tumor was confined to the subarachnoid space along the dorsal aspect of the spinal cord and lower brain stem, extending from the level of the rostral end of the medulla oblongata to the cauda equina, a 2.5 cm. section in the lumbar segments of the cord being spared. The clinical manifestation was that of paralysis beginning in the left upper limb and progressing to quadriplegia with death due to respiratory paralysis 31 days after onset of symptoms.



## President's Page

On July 1, 1961, the Department of Public Welfare of this state implemented the Kerr-Mills law. Before and since this move has been instituted, there have been many inquiries as to how the doctor was to be paid. There is no provision in the law that pays the doctor, but there is no law that says that the doctor cannot charge a fee, if the patient can pay. The main purpose of the Kerr-Mills law is to provide hospitalization, nursing home care, and outpatient diagnostic care in a hospital for those 65 and over with an income of \$1,000.00 or less annually. In other words, the Department of Public Welfare will pay for the above mentioned service on these "medically indigent" people when they are encumbered with unexpected hospital expense or nursing home care which their income cannot cover.

There are and will be some of these patients that can pay something on the doctor's bill, and in a case of this kind the doctor can and should charge the patient. The amount of the charge, of course, depends upon the circumstance of the patient or his family. In other words, the charges to these patients should be an individual matter, based upon the financial condition of the patient or his family. Certainly these patients are to be taken care of by the doctors of the state, whether they be completely indigent, can pay a reduced fee, or the regular fee.

The care of these people is no different from what it has ever been, and is within the ethics of our profession. It is hoped that this will help clarify the issue involved, and that the members of the South Carolina Medical Association may do their part in bettering the situation of these people and cooperate to the fullest with the Department of Public Welfare in making the Kerr-Mills law accomplish the ends for which it is designed.

Charles N. Wyatt



# Editorials

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## HOT AND BOTHERED

J. Hampton Hoch, School of Pharmacy,  
Medical College of South Carolina

Perhaps boiling mad would be a better caption for pharmacists' reactions to a sequence of events that came to a head in California late in June.

The July issue of the *Journal of the American Pharmaceutical Association* has full details of the federal court proceedings in which the U. S. Department of Justice prosecuted, or more exactly, persecuted, the Northern California Pharmaceutical Association and pharmacist Donald E. Hedgepeth on charges of violating the Sherman Act.

Their guilt was "promotion" of a prescription pricing schedule which incorporated a professional fee for dispensing or compounding prescriptions.

Actually the profession of pharmacy was on trial in Judge Louis E. Goodman's court—and so was every other profession which accepts the responsibility to compete on the basis of public service rather than price. Although Judge Goodman stated that professional services are immune under the Sherman Act—a point which the U. S. Supreme Court has not yet been required to rule on—he prejudged the suit stating that "I don't think that any experts would convince me that this (i.e. prescription filling) is a professional service. A prescription is only a piece of paper . . . that requires no more professional service from the druggist than putting it in the package and delivering it". The judge's ignorance about pharmacy's professional services may be on a par with the lack of understanding likely to be exhibited by an uneducated person but is not what is expected from a person in his position. Ignorance is bad enough, but the judge refused to be enlightened by prominent physicians and pharmacists who were in court to shed light on the black and vacant recesses of the court.

The testimony of Drs. Rouse, Scheele and

Klumpp was brushed aside as irrelevant and immaterial. The closed mind attitude of the Judge was a blatant factor bound to impress the jury. The prosecutor's use of Kefauverish tactics to inflame public opinion against pharmacy by wild allegations and attempting to show that poor sick people were *robbed* of over \$3 million annually because pharmacists used suggested fee schedules was a more subtle maneuver. The condition and the tactic resulted in a verdict of guilty.

At this moment in history pharmacy may be a convenient whipping boy for some employees of the anti-trust division but they should be made to realize that everything that is politically expedient is not morally right. What happens to integrity in the health professions under defamatory proceedings such as this San Francisco burlesque? Despite legislative recognition of pharmacy's professional status the court has decreed that this is meaningless.

If our courts fail to support legislative recognition and restrictions granted to and placed on practitioners in the health professions where are we headed? If the dispensing or compounding of a prescription is not a professional service because it involves materials shipped in interstate commerce and this commercial fact takes precedence over other considerations, what is the status of an ampul of antibiotic (also in interstate commerce) when administered by a nurse or physician? Does the injection suddenly become a non-professional act because the ampul crossed state lines in arriving at the doctor's office?

It is difficult to understand the court's reasoning which held that because a pharmacist was employed on a salary basis and did not directly receive the fee portion of a prescription charge, the professional fee became the store owner's "mark-up" on a piece of merchandise. Does a professional service cease to be such when performed on a salary basis, e.g. in the U. S. Public Health Service?

Pharmacy's fight in this instance is important for all the health professions and their fee schedules.

Americans imbued with love and admiration for our republic, respecting the authority that we, the people, have granted to the judiciary, are not content to see legislative enactments suborned by the bench, twisted or extended in a fashion never intended by our elected representatives.

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### EYE DOCTORS

To a considerable segment of our population, any optometrist who advertises blatantly that with eye checking devices he can fit glasses is just as well qualified as the true ophthalmologist who must maintain the same professional reticence which is common to other elements of medicine. This poorly informed segment of people believes that the methods of the optometrist are adequate and that the care of the eyes which is rendered is equal to that of a graduate doctor of medicine. The existence of this situation has been a heavy cross for the ophthalmological profession to bear, and the solution of the problem is not in sight.

For several years, a pamphlet entitled "What Medical Authorities Say about Drops" has been widely circulated, principally through the offices of optometrists. This pamphlet attempts to discredit the use of cycloplegics in refraction, and the use of other drops necessary to the work of the ophthalmologist.

The pamphlet quotes six persons all purporting to be eminent medical authorities, doctors of medicine. It appears from a counterblast prepared by the National Foundation for Eye Care that the statements of the first pamphlet are entirely misleading, and that the "authorities" quoted are in no way entitled to the status claimed for them. Unfortunately, this rebuttal is not so easily transmitted to the public, and its message to a large extent is wasted in unproductive quarters.

It would seem that doctors of medicine would be sufficiently alert to the dangers of the situation that they would at least refrain from referring patients to optometrists, but it appears that such is not the case, and that a not inconsiderable number of our physicians

patronize this class of technician. It is reported that even senior medical students occasionally take their personal eye problems to the optometrists rather than to the ophthalmologists. This would seem to be a difficult attitude to explain in people who must have been exposed recently to an exposition of the superior value of the ophthalmologist over the optometrist in all matters of eye care. Perhaps further enlightenment of the profession in general and of its students would be in order.

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### NEW ORAL THERAPY FOR TRICHOMONAS INFECTIONS

*Medical World News*<sup>\*</sup> contains a description of an oral treatment for trichomonas infections. The report is based on an A. M. A. scientific exhibit at the annual meeting in New York. The exhibit reports the results of a study made at Duke University School of Medicine. This study follows a series of clinical reports from other countries, where the new drug has been used for several years.

The fact that the American study was done by the able and trustworthy group at Duke, lends significant credence to the trustworthiness of the report.

However, it is difficult to overcome a considerable degree of skepticism which has resulted from the failures after optimistic reports of, perhaps, a hundred successive treatment regimes, which have been reported in rapid succession for nearly fifty years.

There is a pressing need for a reliable form of therapy for the disturbing and embarrassing trichomonas vaginal infections. Although vigorous vaginal treatments of various kinds will result in amelioration of the symptoms, permanent cure is an entirely different and hard to provide result. Reinfection or failure to cure may result from sexual contact from an infected male, or the organisms may persist in the urine, or reinfection may occur from some other unrecognized source.

The terms used in various reports, namely: "Incredible but true;" "We didn't believe it (an oral dependable curative drug) could be made. Now it has;" "Given systemically (it) is effective in both female and male patients;"

2:16 (August 4, 1961)

"Not a single failure (in a series of 46 women and 20 men);" "In 44 treated patients, there were 44 cures;" are certainly reassuring but they are also strongly reminiscent of earlier reports of other studies which later gave rise to disappointment.

The Duke report will be published in the *American Journal of Obstetrics and Gynecology*. The drug, Flagyl, which was the therapeutic agent used in the various series referred to, is not yet on the American market. However, Searle will probably make it available soon. When that occurs, and after a careful study of the Duke report when it is published, a careful clinical trial will be warranted. In the meantime, be forewarned, for some one of the popular women's magazines is likely to publish an article on this "wonder" drug at any time. Don't allow your patients to be better informed concerning it than you are.

J.D.G.

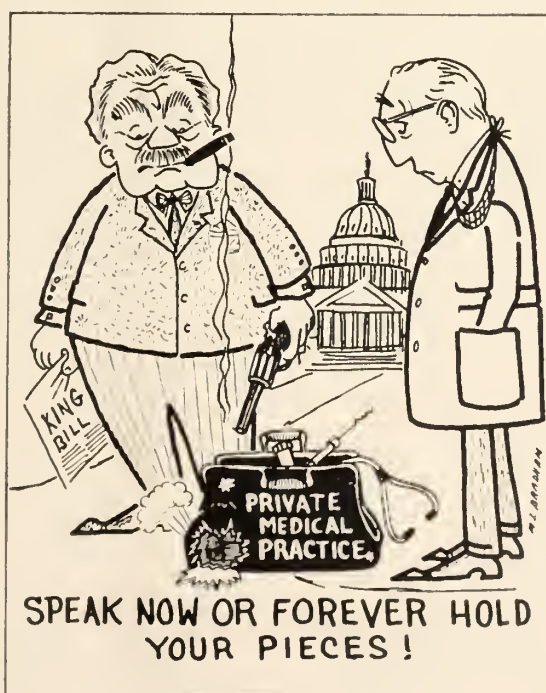
### THE NATIONAL FOUNDATION

Certain changes of policy by the Foundation in the recent past have appeared to many

medical people to be of somewhat dubious quality, and it is apparent that what seemed to be an unwise expansion in the face of unmet established needs reduced materially the popularity of a long established charitable organization. Fortunately there has been some change of heart in the ranks of the Foundation, as may be seen by the statements appearing in an article elsewhere in this issue.

The development of Evaluation Clinics is planned to give aid to the physician who is handling difficult cases of arthritis and birth defects. A program which would furnish at the expense of the Foundation Chapters proper consultants to those who participate in the clinics, offer speakers to medical meetings, and perhaps individual consultation to physicians who for one reason or another may not feel the need of an Evaluation Clinic, would be of service to our doctors and our patients.

We have been assured that in the development of these new fields the old and still great responsibility of the erstwhile National Foundation for Infantile Paralysis will not lose sight of its original purposes.





## HEARING ON THE KING BILL

A number of witnesses, including the Communist Physicians Forum, Inc., the International Association of Machinists, and the American Nurses Association, attacked the stand of the American Medical Association. Indeed, Allan M. Butler, M. D., past president and currently a member of the Board of Directors of the Physicians Forum, devoted most of his testimony to vitriolic attacks on the AMA and accusations against Ernest B. Howard, M. D.

In 1948 we referred to the nursing profession as "the soft belly of American Medicine." Through the years it has grown softer, more vulnerable. Nurses, as a group, are the least informed of the health professions with respect to legislation for national compulsory health insurance. They do not understand the meaning of the Forand and King bills, nor did they understand the Wagner-Murray-Dingell bills.

The American Nurses Association for many years has been dominated by past and present Federal officials and by the leading lobbyists for nationalized medicine. They placed implicit faith in Michael M. Davis, lobbyist for Federal medicine, for a long period. Then they turned to the leadership of Wilbur J. Cohen who has indoctrinated them through a series of misleading articles in their own professional journal. They are like a herd of bewildered sheep crowding around a wolf whose only intent is to devour them.

The ANA needs a complete overhaul. New officers and a new Washington representative might give the nurses of this country an opportunity to understand Federal legislation that would engulf them. How many nurses know that the King bill would shut out 44,000 private duty nurses? How many nurses have read the actual bill as against the unanalytical memoranda emanating from Helen V. Connors and Julia C. Thompson? How many nurses have gone to Great Britain to study nationalized medicine in action?

The ANA is using divisive tactics to drive a wedge between nurses and physicians simply because the latter have tried to explain the meaning of Federal proposals which the nurses do not understand. Dana Hudson, R. N., did a great service to her profession in denouncing the stand and the tactics of the ANA on August 1.

*Challenge to Socialism*

## EASTER SEAL FAMILY CAMP

Sponsored annually in a mountain setting above Greenville, the Crippled Children Society of South Carolina operates the Easter Seal Family Camp for the purpose of providing carefully planned recreational activities for mentally alert, severely handicapped boys and girls who cannot go to other camps. Ramps and other facilities for wheel chair persons are provided.



*Everything is good at Easter Seal Family Camp!*

Not only is the Camp approved by the South Carolina Medical Association but that body provides medical leadership for the entire camp period. Now in its fourth year of operation the camp has won nationwide recognition and is accredited by the American Camping Association.

The program is planned especially for the cerebral palsied but other handicapped boys and girls, along with their parents, brothers and sisters, are eligible upon referral, provided they are mentally alert but too physically handicapped to be admitted to the Orthopedic Camp sponsored by the South Carolina State Board of Health or to a regular camp.

Top-flight counselors from State Health, Welfare, Education, Vocational Rehabilitation Departments and cerebral palsy specialists are on hand to assist with parent sessions. Subjects discussed include dressing and feeding techniques, discipline, and other phases of training of interest to parents.

Boy Scout and Girl Scout Councils choose outstanding Scouts to serve as volunteer "Buddies" to the Campers. The Scouts are given a three and one-half day intensive training session to prepare them for their duties.

Thomas G. Goldsmith, M. D., Greenville, was chairman of the Camp's Medical Committee. Serving with Dr. Goldsmith were Doctors William M. Shirley and Edwin H. Martinat of Greenville.

**REPORT ON ACTIONS OF  
THE HOUSE OF DELEGATES  
AMERICAN MEDICAL ASSOCIATION  
110TH ANNUAL MEETING**

**JUNE 25-30, 1961**

**NEW YORK CITY**

Osteopathy, medical discipline, communications, surgical assistants, drug legislation, general practice residencies, relations with allied health professions and services, and poliomyelitis vaccine were among the major subjects covered by 115 resolutions and 28 reports acted upon by the House of Delegates at the American Medical Association's 110th Annual Meeting held June 25-30 in New York City.

Dr. George M. Fister of Ogden, Utah, member of the AMA Board of Trustees and previously a member of the House of Delegates, was named president-elect of the Association. Dr. Fister will become president at the June, 1962, annual meeting in Chicago, succeeding Dr. Leonard W. Larson of Bismarck, North Dakota, who assumed office at the Tuesday night inaugural ceremony in New York.

The AMA 1961 Distinguished Service Award was voted to Dr. Walter H. Judd of Minneapolis, physician and member of Congress, for his contributions as a medical missionary, humanitarian and statesman devoted to world peace.

Total registration through Thursday, with half a day of the meeting still remaining, had reached 56,315, including 22,681 physicians.

*Osteopathy*

In considering a report of the Judicial Council and three resolutions on the subject of osteopathy, the House of Delegates agreed with the intent of the report and resolutions, but instead adopted the following statement of AMA policy:

"1. There can never be an ethical relationship between a doctor of medicine and a cultist, that is, one who does not practice a system of healing founded on a scientific basis.

"2. There can never be a majority party and a minority party in any science. There cannot be two distinct sciences of medicine or two different, yet equally valid systems of medical practice.

"3. Recognition should be given to the transition presently occurring in osteopathy, which is evidence of an attempt by a significant number of those practicing osteopathic medicine to give their patients scientific medical care. This transition should be encouraged so that the evolutionary process can be expedited.

"4. It is appropriate for the American Medical Association to *reappraise its application of policy* regarding relationships with doctors of osteopathy, in view of the transition of osteopathy into osteopathic medicine, in view of the fact that the colleges of osteopathy have modeled their curricula after medical schools, in view of the almost complete lack of osteopathic literature and the reliance of osteopaths

on and use of medical literature, and in view of the fact that many doctors of osteopathy are no longer practicing osteopathy.

"5. Policy should not be applied individually at state level according to the facts as they exist. Heretofore, this policy has been applied collectively at national level. The test now should be: Does the individual doctor of osteopathy practice osteopathy, or does he in fact practice a method of healing founded on a scientific basis? If he practices osteopathy, he practices a cult system of healing and all voluntary professional associations with him are unethical. If he bases his practice on the same scientific principles as those adhered to by members of the American Medical Association, voluntary professional relationships with him should not be deemed unethical."

*Medical Discipline*

In a major move designed to strengthen the profession's disciplinary mechanisms, the House approved the conclusions and recommendations of the Medical Disciplinary Committee, with only three word changes. The House discharged the committee with thanks and commendation and directed that its functions be assumed as a continuing activity of the Judicial Council.

One recommendation suggests that "The bylaws of the American Medical Association be changed to confer original jurisdiction on the Association to suspend or revoke the AMA membership of a physician guilty of a violation of the Principles of Medical Ethics or the ethical policy of the American Medical Association regardless of whether action has been taken against him at local level."

Another "encourages and urges that each state association report annually to the American Medical Association all major disciplinary actions taken within its jurisdiction during the preceding calendar year."

The report urged state and county medical societies to utilize grievance committees as "grand juries" to initiate action against an offender so as to obviate the necessity of making an individual member of a medical society complain against a fellow member.

The House suggested that each medical school develop and present a required course in ethics and socio-economic principles, and that each state board of medical examiners include questions on ethics and proper socio-economic practices in all examinations for license.

The report concluded with a recommendation that "American medicine at the national, state and local level maintain an active, aggressive and continuing interest in medical disciplinary matters so that, by a demonstration of good faith, medicine will be permitted to continue to discipline its own members when necessary."

*Communications*

Acting upon four resolutions related to the Association's public relations program, the House adopted a substitute resolution directing the Speaker of the House of Delegates to name seven elected members of the House as a special committee "to study and

continually advise the Board of Trustees on the broad planning and coordination of all phases of communications of the American Medical Association, so that the public and the members of the medical profession are properly and adequately advised of the policies and concern of the medical profession with respect to all phases and aspects of medical care for all people."

The House agreed with a reference committee opinion that "we have a very adequate Division within the A.M.A. capable of implementing any program of communications." The approved committee report also said that "the Communications Division of the A.M.A. needs the active support and cooperation of the House and of all members of the Association."

#### *Surgical Assistants*

In considering a Board report and two resolutions on the subject of surgical assistant's fees, the House approved the following five basic principles developed by the Judicial Council and the Council on Medical Service:

"1. Each member of the A.M.A. is expected to observe the Principles of Medical Ethics in every aspect of his professional practice.

"2. Each doctor engaged in the care of the patient is entitled to compensation commensurate with the value of the services he has personally rendered.

"3. No doctor should bill or be paid for a service which he does not perform; mere referral does not constitute a professional service for which a professional charge should be made or for which a fee may be ethically paid or received.

"4. It is ethically permissible for a surgeon to employ other physicians to assist him in the performance of a surgical procedure and to pay a reasonable amount for such assistance.

"This principle applies whether or not an assisting physician is the referring doctor and whether he is on a per-case or full-time basis. The controlling factor is the status of the assisting physician. If the practice is a subterfuge to split fees or to divide an insurance benefit, or if the physician is not actually employed and used as a bona fide assistant, then the practice is contrary to ethical principles.

"5. Under all other circumstances where services are rendered by more than one physician, each physician should submit his own bill to the patient and be compensated separately."

#### *Efficacy of Drugs*

The House strongly endorsed a Board report which pointed out the problems that would result from amending the Food, Drug and Cosmetic Act to authorize the Food and Drug Administration to determine the efficacy, as well as the safety, of a prescription drug prior to the approval of a new drug application. The A.M.A. will oppose such legislation before the Kefauver Committee, the report pointed out, on the basis that "a decision with respect to the effectiveness of drugs is dependent upon extended research, experimentation and usage." The House agreed that vesting such authority in the Food and Drug Administration would operate to limit research, the

marketing of drugs and the exercise of discretion by the medical profession. "The marketing of a relatively useless drug is infinitely less serious than would be the arbitrary exclusion from the market of a drug that might have been life saving for many persons," the House declared.

#### *General Practice Residencies*

Eight resolutions were introduced on the subject of creating new two-year, residency training programs in general practice. The House agreed that there appears to be a need for such programs for those individuals who desire more experience in obstetrics and surgery than may be available in the currently existing Family Practice Program. It approved a substitute resolution directing the Council on Medical Education and Hospitals to consider for approval other two-year programs in general practice which incorporate experience in obstetrics and surgery. The Council will review these programs on the basis of their individual merits and conduct a long-range evaluation of the new programs as well as the previously established Family Practice Programs.

#### *Relations With Other Health Professions and Services*

The House considered a Board report and twelve resolutions dealing with various aspects of medicine's relationships with allied health professions and services, including optometry. The Board report recommended the creation of a new A.M.A. Council to handle all the problems involved. The House, however, accepted a reference committee suggestion for establishment of a new Commission to Coordinate the Relationships of Medicine with Allied Health Professions and Services. The Commission will be composed of seven members appointed by the Speaker of the House. Subcommittees, composed of from three to five members selected by the Commission from lists of names submitted by the scientific sections, will consider problems in specific areas. The Commission will correlate and catalogue the reports of the subcommittees and will act as liaison agent between the subcommittees and those A.M.A. Councils where there may be overlapping interests.

#### *Polio Vaccine*

The House approved a report by the Council on Drugs on the present status of poliomyelitis vaccination in the United States and urged that it be made available to all physicians through the most effective communications media. The report clearly outlines procedures recommended for implementation of mass vaccination with the new oral vaccine when it becomes available. The House complimented the Council on its "clear and succinct statement on the initiation of the new campaign which will be needed to promote the new vaccine." The House agreed that the report provides the practicing physician with a reliable series of answers to the many questions which will arise during the change-over from Salk vaccine to oral vaccine. The report emphasizes, however, that "physicians should encourage, support and extend the use of Salk vaccine on the widest possible scale at least until the oral polio-virus vaccines currently under



development and clinical trial become available."

#### *Miscellaneous Actions*

In dealing with resolutions and reports on a wide variety of other subjects, the House also:

Approved the "Guides to Physician Relationships with Medical Care Plans," submitted by the Council on Medical Service, with these two changes: deletion of item 5 under "Responsibilities of the Medical Society," which said "To recognize that properly qualified physicians employed by, or otherwise serving, medical care plans should not be denied professional rights and privileges because of their service to such plans," and addition of a new item 1 under "Responsibilities of the Medical Care Plan," which reads: "To provide the beneficiary of the plan with free choice of qualified physicians";

Reaffirmed its support of the *Kerr-Mills* program for the needy and near-needy aged and its opposition to any legislation of the *King-Anderson* type, declaring that the medical profession "will not be a willing party to implementing any system which we believe to be detrimental to the public welfare";

Approved a markedly expanded *drug information program* submitted by the Board of Trustees and the Council on Drugs;

Adopted the final report of the *Special Study Committee* of the Council on Medical Education and Hospitals and recommended that copies be sent to all medical school deans in the United States;

Decided to hold the *1963 Clinical Meeting* in Portland, Oregon, instead of Las Vegas, Nevada, as recommended by the Board;

Approved a plan by the new A.M.A. Department of International Health to cooperate in the recruitment of volunteer physicians for emergency medical service in *foreign mission fields*;

Agreed to an increase of \$20 in the annual A.M.A. *membership dues* to be implemented over a period of two years: \$10 on January 1, 1962, and \$10 additional on January 1, 1963;

Discontinued the Association's *General Practitioner of the Year* award;

Opposed legislative and administrative mandates which would compel physicians to prescribe drugs, or require pharmaceuticals to be sold, by *generic names* only;

Reaffirmed the Association's opposition to compulsory inclusion of physicians under the *Social Security system*;

Urged immediate legislation that will provide strong economic motivation for the construction and maintenance of *fallout shelters*;

Disapproved two resolutions which would have discontinued the scientific activities at the *Clinical Meeting*;

Urged *immunization campaigns* against both tetanus and influenza, and

Asked state and county medical societies to give full support to the *First National Congress on Medical Quackery* to be jointly sponsored next October 6-7 in

Washington, D. C., by the A.M.A. and the Food and Drug Administration.

#### *Opening Session*

At the opening session on Monday, Dr. E. Vincent Askey of Los Angeles, retiring A.M.A. president, challenged physicians and medical organizations to re-examine their own efforts to strengthen and improve medicine, and he warned against defeatism and failure to accept personal responsibility for answering criticisms. Dr. Larson, then president-elect, called on the profession to strengthen methods of self-discipline in both the state and county societies, adding that physicians must be concerned with improper or incompetent practice and unethical actions of all kinds. The 1961 Goldberger Award in Clinical Nutrition was presented to Dr. Frederick J. Stare, chairman of the Department of Nutrition at Harvard Medical School.

#### *Inaugural Ceremony*

Dr. Larson, in his inaugural address Tuesday night, said that the really good doctor, guided by the professional spirit, will always remember that medicine exists for just one purpose—to serve humanity. When the essence of that spirit is diluted or destroyed, either in an individual physician or in a nation, he added, medicine ceases to be a profession in the highest sense of the word. Dr. Larson also presented the Distinguished Service Award medal to Rep. Judd. Entertainment highlight of the inaugural program was a concert by the Montgomery County Medical Society Glee Club of Dayton, Ohio.

#### *Election of Officers*

In addition to Dr. Fister, the new president-elect, the following officers were named at the Thursday session:

Dr. Eustace A. Allen of Atlanta, Ga., vice president; Dr. Norman A. Welch of Boston, re-elected speaker of the House, and Dr. Milford O. Rouse of Dallas, Tex., re-elected vice speaker.

Elected to the Board of Trustees were Dr. Wesley W. Hall of Reno, Nev., to succeed Dr. Fister; Dr. Homer L. Pearson, Jr., of Miami, Fla., to replace Dr. Julian P. Price of Florence, S. C., and Dr. Charles L. Hudson of Cleveland, Ohio, to fill out the term of the late Dr. Cleon A. Nafe of Indianapolis. The Board named the following officers: chairman, Dr. Hugh Hussey of Washington, D. C.; vice chairman, Dr. Percy Hopkins of Chicago, and secretary, Dr. James Z. Appel of Lancaster, Pa.

Named to the Judicial Council were Dr. Robertson Ward of San Francisco, to succeed himself, and Dr. Elmer G. Shelley of North East, Pa., to replace Dr. Pearson.

Re-elected to the Council on Constitution and By-laws was Dr. Walter E. Vest of Huntington, W. Va.

New Members of the Council on Medical Service are Dr. Charles Ashworth of Providence, R. I., succeeding Dr. Carlton Wertz of Buffalo, N. Y., and Dr. Burtis E. Montgomery of Harrisburg, Ill., to succeed Dr. Charles Hudson of Cleveland.

For the Council on Medical Education and Hospitals, Dr. Dwight L. Wilbur of San Francisco was

elected to succeed Dr. John W. Cline of the same city, and Dr. Kenneth C. Sawyer of Denver, Colo., was named to succeed Dr. Guy A. Caldwell of New Orleans.

F. J. L. Blasingame, M. D.  
Executive Vice President  
American Medical Association

## **THE NATIONAL FOUNDATION PROGRAM**

William S. Clark, M. D., Director of Medical Care of The National Foundation (March of Dimes organization), has announced modifications in program policies. Following three years of extensive study, it was concluded that the patient aid program should provide a greater range of opportunities for Chapters to participate in meeting community health needs as they exist today and as they will develop in the future.

Polio will continue to be the first priority of the organization. Chapters are to enter direct patient aid in the fields of arthritis and birth defects only to the extent of their funds available beyond their polio responsibilities. Chapters have been requested to conduct their direct patient aid program on a pay-as-you-go basis from their share of their March of Dimes Campaigns, and are requested to minimize credit operations. Financial assistance for treatment of polio, arthritis, and birth defect patients is to supplement the financial resources of the family, insurance benefits, tax funds, etc., and only to the extent of Chapter resources. Patient eligibility is based on the patient's need for treatment, the cost of which would cause undue hardship to the family and when the patient is not eligible for adequate services from any other source.

The National Foundation Direct Patient Aid policies of 1960 in the fields of polio and arthritis continue basically the same but the following modification of policy in the field of birth defects is now effective: Policy changed from "Patients under 19 years of age with progressive hydrocephalus, encephalocele or symptomatic spina bifida" to "Patients under 19 years of age with congenital defects, exclusive of birth injuries." Assuming retention of the other limitations on eligibility and permissible Chapter expenditures, this one change should provide Chapters with new opportunities to expand gradually into the broad field of congenital defects in a more realistic manner.

The National Foundation program is designed to supplement but not duplicate services of other agencies in the fields of polio, arthritis and birth defects.

In addition to (not replacing) the traditional direct patient aid program, the NF is permitting selective programs embodying at the Chapter level a basic philosophy of the pursuit of excellence in the care of patients with chronic, disabling disease. This program would permit Chapters, with Headquarters' approval, to make annual grants to qualified hospitals in South Carolina for the following purpose: To promote, develop, improve, or expand diagnostic, habilitation, re-

habilitation or consultative services in outpatient Evaluation Clinics for arthritis and congenital defect patients under 19 years of age. In addition to the above, selected activities permissible within present policies will be encouraged to help stimulate professional and public interest in arthritis and birth defects. These include: 1) Medical and lay symposia; 2) Short courses for professional personnel; 3) Medical speakers for professional meetings; 4) Community case studies.

These new policies take into account The National Foundation's continuing responsibility for polio patients, the compelling differences in birth defects and arthritis as compared with polio and the infinitely greater variety of medical problems involved, the essential emphasis on meeting qualitative instead of quantitative needs in the health field, and the unequal distribution of resources among Chapters.

National Headquarters will continue to assist financially indebted Chapters to the extent of its limited funds available for this purpose each year until previous polio debts are paid. During 1961 Headquarters has paid directly to hospitals in the seven southeastern states \$282,000 on previously authorized polio bills.

The development in South Carolina of Evaluation Clinics is to be financed by Chapters that have available the necessary funds above their polio responsibilities and are thus able to make this investment for the development of the new program, aware that with the success of the program in the new areas there should be additional funds available to take care of previous commitments. This should redound to the benefit of the polio program as well as the two new areas.

Wilmer Sims, State Representative, The National Foundation, 1310 Lady St., Columbia, S. C.

## **AUTOMOTIVE CRASH INJURY RESEARCH IN SOUTH CAROLINA**

At the 1961 annual meeting of the South Carolina Medical Association the House of Delegates approved and endorsed an automobile crash injury research program sponsored by Cornell University, in co-operation with the South Carolina Board of Health and the South Carolina Highway Patrol. Also on May 5, 1961 the Board of Trustees of the South Carolina Hospital Association officially endorsed this research program. In this new study which was initiated on June 1st, South Carolina became the twentieth state to collaborate in this interstate data-collecting system.

The purpose of this program is to obtain reliable data on the frequency, nature and specific causes of injury to occupants in passenger cars involved in automobile accidents. In addition, these studies are producing medical statistics which promise to implement treatment of auto crash victims through more definitive knowledge of the nature and scope of the problem. Data from other co-operating states have formed a basis by which automobile manufacturers have made important design changes in post-1955 passenger cars which are specifically engineered to provide occupant protection during accidents. Re-

liable information being obtained on the degree of protection offered by these items, which include the seat belts, springproof door latches, energy-absorbing steering wheels, padding, et cetera, is most encouraging.

The interstate research effort differs from previous highway accident studies in that it is seeking information on causes of injury rather than causes of the accident itself. Trauma produced in highway accidents is regarded as the mass disease which is as characteristic of our times as were bubonic plague, typhoid fever, and malaria in previous years. In studying this "disease," an epidemiologic approach has been utilized with the co-operation of medical societies, state Departments of Public Health and state police groups of Indiana, North Carolina, Virginia, Maryland, Georgia, Connecticut, New York, Vermont, Pennsylvania, Minnesota, Texas, Colorado, Michigan, Arizona, California, Oregon, Ohio, New Mexico, Illinois, South Carolina and Wisconsin which became the twenty-first state to join this interstate program on July 1st, 1961.

With carefully designed standardized data-gathering forms, the enforcement officers and the medical profession are contributing data from this "laboratory of the highways" to the Automotive Crash Injury Research group at Cornell, where a standard technique of evaluation and analysis is employed to identify the characteristics of the environment which produces trauma.

With the introduction by automobile manufacturers of new door lock designs, energy-absorbing steering wheels, specially designed energy-absorbing padding on the instrument panels, and forward overhead structure, as well as safety belts, the epidemiologic approach can now also be used as an objective measuring device to determine the degree of reduction in both the frequency and severity of injury that these changes are providing. Studies of post-1955 automobiles involved in accidents indicates the following:

**Door Latching Mechanisms:** In the samples studied, the incidence of door opening in post-1955 cars was reduced as much as one-third in cars with improved latches, with the result that the frequency of ejection was reduced by about 40 per cent. The effect has been to reduce the risk of dangerous and fatal injuries about 12 per cent.

**Findings Regarding the Ejection Problem:** Common popular belief has been that "being thrown clear of the car" during an accident heightens one's chance of survival. Previous findings by Cornell have demonstrated conclusively that such is contrary to fact, and that the risks of death are increased nearly five times when a person is thrown from the car. If the annual level of traffic fatalities remains on the order of approximately 40,000, Cornell reports that conservatively estimated 5500 lives could be saved each year if ejection were prevented.

**Steering Assemblies:** As in the case of padding materials, data are still insufficient for statistical

analysis. From available cases, clinical comparison indicates a reduction of severe chest injuries.

**Seat Belts:** When in use at the time of accident, seat belts are associated with about a 35 per cent reduction in the risk of major and fatal grade injuries.

Testimony in hearings before the Subcommittee on Traffic Safety of the House of Representatives on the use of seat belts, generally coincided with the position taken by the Automotive Crash Injury Research spokesmen on the efficacy of seat belts. The automobile industry has announced that starting with 1962 models, seat belt attachment points will be provided in all cars.



Studies in South Carolina are expected to represent an important addition to the interstate program in its continued effort to evaluate safety design changes and to produce data which can be useful as a basis for planning further safety design improvements. Standard statistical sampling techniques are employed involving the investigation of all injury-producing accidents in selected sampling areas. Individual areas are studied for periods of six months each and the South Carolina study is scheduled for a tenure of at least three years. The accompanying illustration shows the area currently under study. Mechanics of the program require that state highway patrol investigators fill out special reports for all injury-producing accidents in the current study area. Following his investigation of the accident, the state highway patrolman notifies the doctor or hospital having charge of accident victims that these cases come within the scope of the study. All physicians in these areas have been apprized of the study through letters from the President of the South Carolina Medical Association. Letters are sent to the Hospital Administrators by the Executive Director of the South Carolina Hospital Association and Hospital Administrators and their staffs receive further instructions from Cornell field personnel.

Medical forms are brief and do not require much of the physician's time. Upon completion they are mailed to the South Carolina State Health Department to be matched with related police reports and special photographs illustrating car damage details and injury



causes before forwarding to Cornell for analysis and statistical use. Serving as Medical Coordinator of this program is Dr. Hilla Sheriff, Director, Division of Maternal and Child Health of the South Carolina State Health Department. Earnest participation by the medical profession in this effort, which is aimed at solving one of the nation's foremost epidemiologic problems, is urgently requested. Unless the injuries of each person hurt or killed in the passenger car accident within the sampling areas is carefully recorded, the effectiveness of this study and the value of the subsequent data obtained may be seriously reduced.

Cornell Automotive Crash Injury Research studies are sponsored by the United States Public Health Service, and the Automobile Manufacturers Association.

By collaborating with Automotive Crash Injury Research, the physician will be furnishing the basic medical data necessary to combat this epidemic problem. Only with valid medical data can this mass disease be successfully attacked.

### THE MONTH IN WASHINGTON

The American Medical Association cited more than 50 reasons why the vast majority of the nation's physicians believe the Administration's medical care program would be "bad medicine for the people of this country."

The A. M. A.'s objections to the proposal were spelled out in a detailed, 91-page printed statement presented to the House Ways and Means Committee by Dr. Leonard W. Larson, Bismarck, N. D., president of the A. M. A.

The committee held two weeks of hearings (July 24-Aug. 5) on the Administration proposal (H. R. 4222) which would provide limited hospitalization, nursing home care and outpatient diagnostic services for social security recipients. The program would be financed by an increase in payroll taxes on workers, employers and the self-employed.

Dr. Larson declared that the Administration program would force upon Americans a system of health care in which the quality of medical care would deteriorate, in which quality would become secondary to cost.

He said American medicine is the best in the world, medical education unsurpassed and the qualifications of U. S. physicians unmatched.

"Ours is a dynamic system of health care—and it works," he said. "The very fact that we now have 16½ million Americans 65 years of age and older proves that it works.

"Yet, this same system of medical care is now under attack. At a moment when American medicine is pre-eminent throughout the world, it is proposed that we adopt the very systems under which one European nation after another has lost its former leadership in medical science.

"The staggering costs of such plans, the administrative problems they create—let these considerations be

secondary", he said. "The important thing is to see, at close range, the disruption of the doctor-patient relationship; the delays in admission to hospitals; the time wasted in the over-crowded offices of doctors; the regimentation of medical practice; the effect of the program on medical research; the availability of medical facilities and personnel—in other words, medicine in action on a government-run, assembly-line basis."

Dr. Larson said also:

1. Congress is being asked to plunge into a compulsory government-operated program of health care for certain of the country's elderly without knowing what even the first-year cost will be—whether \$1 billion or \$4 billion—and without any clear idea of the extent of the problem it seeks to solve.

2. The bill under consideration would give a single government official the power to "become the nation's czar of hospital care."

3. Contrary to statements of supporters of the measure that physicians' services are not included in the program, more than 50,000 doctors would be directly affected by regulations and controls exercised by government over operations and administration of hospitals.

4. Enactment of the program would "lower the quality of medical care available to the older people of the United States" because "it would introduce into our system of freely practiced medicine elements of compulsion, regulation and control" by government.

5. The Administration proposal is unnecessary in light of the true economic status of the aged and because of the spectacular rise of voluntary, private health insurance coupled with passage by Congress of the Kerr-Mills Medical Aid for the Aged Law last year and the existence of other public and private programs of aid to the needy.

6. Health care at the expense of the working people would be provided for millions who are financially able to pay for their own care.

7. The legislation "proposes that we distrust the brains and capacities of today's Americans" because "it suggests that the aged—as an entire group—are not capable of looking after their own affairs and providing for their own needs."

8. Increasing costs of the program could impose such a financial strain on social security that the entire system could be jeopardized.

9. The Administration's bill is just as objectionable as the five similar health care proposals rejected by Congress since 1942.

10. The bill would violate "American ideals of independence, self-sufficiency and personal responsibility" by establishing a system in which medical aid would be provided not on the basis of need but on the basis of age.

Dr. Larson described estimates of the cost of the Administration program as "confusing."

The A. M. A. president reminded committee members that HEW Secretary Abraham Ribicoff had told them that "a closer study" had revealed it would be

necessary to increase the taxable wage base from the present \$4,800 to \$5,200, rather than the \$5,000 fixed in the bill when it was introduced.

He also pointed out that HEW originally had said nursing home services during the first year of operation of the Administration scheme would cost \$9 million.

But in May, Dr. Larson said, HEW officials reported the figure as "unrealistically low" and lifted it to "somewhere between \$25 million and \$255 million."

"Obviously this estimate is something less than precise," Dr. Larson said.

The A. M. A. president said that supporters of the Administration proposal have built their case on five false premises: 1) that the sociological problems of older people can be solved through legislation; 2) that most, if not all, of the aged are in poor health; 3) that most, if not all, of the aged are verging on bankruptcy; 4) that the problem of the aged in financing their health costs will get worse before it gets better, and 5) that voluntary health insurance and prepayment plans, private effort and existing law will not do the job that needs doing.

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# Announcements

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## **SOUTH CAROLINA MEDICAL ASSOCIATION MEETING — 1962 MYRTLE BEACH**

As this notice goes to press, the Chairman of the Program Committee is leaving for Myrtle Beach to discuss some of the necessary details of the 1962 program with Mr. Bauchner, the Manager of the Ocean Forest Hotel. Mr. Meadors is pulling the necessary strings in an effort to have a public address system in appropriate gathering places in the hotel to keep you informed about the progress of the program. Dale Groom and Cathcart Smith are calling upon their past experience to keep the machine moving smoothly. Charlie Wyatt and Robert Wilson, ex-officio members, are keeping us on the track. The Program Committee met again in late August to iron out the overall plan. Individual speakers and panclists will be contacted as soon as possible.

The response to our last request for suggestions, which appeared in the July issue of this Journal, has been of excellent quality. However, a little more "quantity" would now be appreciated. Your Committee wants you to have what YOU want. To borrow a phrase from Washingtonese, the plans will be "finalized" in September. Send us a letter or pick up the phone TODAY. We love to hear from our friends. Our enemies may be of even greater assistance.

Forde A. McIver, M. D., Chairman  
Program Committee  
16 Lucas Street  
Charleston 16, S. C.

## **SOUTH CAROLINA CHAPTER— AMERICAN COLLEGE OF SURGEONS**

Annual Meeting  
November 1-2, 1961  
Charleston, S. C.

November 1—Amphitheater of Medical College Hospital

John Steinhaus, M. D., Emory University—General anesthesia as a cause of cardiac arrest

Michael DeBakey, M. D., Baylor University—Renal revascularization

Winner of Contest among surgical residents will read his paper

November 2 (Founders' Day Seminar)—Barnes Auditorium

Dr. Steinhaus—Systemic effects of local anesthetics—  
toxic or therapeutic

Dr. DeBakey—Surgery of the carotid and vertebral  
arteries

Kenneth M. Lynch, Jr., M. D., Medical College of  
S. C.—Current management of renal tumors

## **THE MEDICAL COLLEGE OF GEORGIA**

Five intensive postgraduate courses patterned for the practitioner are planned for the fall and winter 1961-62 at the Medical College of Georgia, Augusta, Georgia. Featured faculty will include nationally known figures as: Dr. Ralph V. Platou, Professor of Pediatrics and Head, Dept. of Pediatrics, Tulane Univ. School of Medicine, New Orleans, La.; Dr. Louis A. Goldstein, Associate Professor of Surgery (Orthopedics), Univ. of Rochester School of Medicine, Rochester, N. Y., and Dr. Darin Flinchum, Instructor in Surgery, The School of Medicine Emory Univ., Atlanta, Georgia; Dr. Michael Newton, Prof. and Chairman, Dept. of Ob-Gyn, Univ. of Mississippi Medical Center, Jackson, Miss.; Dr. Harold D. Levine, Peter Bent Brigham Hospital, Boston, Mass.; Dr. Champ Lyons, Prof. and Chairman, Dept. of Surgery, Medical College of Ala., Birmingham, Alabama.

Advances in Pediatric Diagnosis and Treatment,  
Oct. 31-Nov. 2, 1961; Fractures in General Practice,

Nov. 14-16, 1961; Obstetric Problems in Private Practice, Jan. 23-25, 1962; Cardiac Emergencies, Feb. 13-15, 1962; and Pre and Postoperative Care, Mar. 20-22, 1962. The courses will be supplemented by members of the faculty of the Medical College of Georgia.

Each course is acceptable for 18 hours of credit by the American Academy of General Practice and registration is limited to a small group for close participant-faculty communication. Registration fee is \$50.00 for each session. Application may be made by contacting Dr. Claude-Starr Wright, Director, Department of Continuing Education, Medical College of Georgia, Augusta, Georgia.

### **International Symposium on Problems of the World's Children Duke University — October 4-8**

Announcement has been received of a symposium entitled "The Commonwealth of Children" which will be held at Duke University on October 4-8. Fourteen committees composed of Duke faculty members, officials, trustees and friends of the University are developing plans for the symposium which were conceived as a tribute to Dr. Wilburt C. Davison, internationally known medical educator and pediatrician, who directed establishment of the Duke University School of Medicine and served as its dean from 1927 until he relinquished that position last year.

Dr. Davison has advanced the welfare of children throughout our country and has inspired countless people with his compassion, ideals and standards of excellence. In planning the Symposium it was felt that no higher honor could be paid Dr. Davison than a demonstration that others would attempt to carry on his work to bring healthier lives and a better world to children everywhere.

The Symposium program will be built around half-day sessions on problems in education and culture, population and economics, and health and social structure. All these areas will be dealt with by experts brought together for the Symposium and each topic will be considered in its relationship to the welfare of the world's children. The program is being planned for a general rather than a specialized audience and all major sessions will be open to the public.

### **ASSOCIATION OF AMERICAN PHYSICIANS AND SURGEONS**

Annual Meeting of Delegates and Assembly  
Asheville, N. C.—Grove Park Inn—Oct. 12-14

#### **Speakers**

R. J. Moorhead, M. D.	J. L. Doenges, M. D.
Revilo P. Oliver, M. D.	E. R. Annis, M. D.
Charles Shuman	Hon. John Bell Williams
Col. W. R. Kintner	Tom Anderson, publisher

## **Deaths**

### **DR. CURTIS PEARCY**

Dr. Curtis Pearcy, 33-year-old anesthesiologist for the Colleton County hospital died August 8 at the Colleton County Hospital, after an illness of several weeks. He was born in Walterboro.

Dr. Pearcy was graduated from Wofford College in 1948, and the Medical College of South Carolina in 1952. He finished his residence in anesthesiology at Iowa State University in 1956. He was a member of the American Medical Association, American Society of Anesthesiology, and International Society of Anesthesiology. He was a member of Chi Phi Medical Fraternity, and Alpha Omega Alpha honorary medical society.

### **DR. W. C. CARNES**

Dr. Walter Cecil Carnes, 50, Lancaster physician died of a heart attack July 13 at his cottage on the Catawba River, where he was recuperating from a heart attack suffered four weeks ago.

A World War II veteran, Dr. Carnes served with the United States Navy Medical Department in the South Pacific.

### **DR. EVERARD A. WILCOX**

Dr. Everard A. Wilcox, retired U. S. Army surgeon,

who retired to Beaufort in 1950 died at the Charleston Naval Hospital in July after a short illness. He was buried in Augusta, his home.

### **DR. JAMES O'HEAR**

Dr. James O'Hear died in Charleston on August 4. He was born May 5, 1901 at Wando Plantation. He attended the College of Charleston and the Medical College of South Carolina.

He practiced medicine in Rhode Island for several years and took postgraduate work at Harvard School of Medicine.

Dr. O'Hear served in the China-Burma-India theatre in World War II as a medical officer in the Army Air Corps.

### **DR. W. R. DUKE**

Dr. Wrightman R. Duke, 50, Dillon surgeon, died July 29 of internal injuries suffered in an accidental 15-foot fall at his country home near the Big Pee Dee River.

Dr. Duke came to the staff of St. Eugene Hospital from Texarkana, Texas, nearly two years ago.

He was graduated from Columbia University in New York and received his M. D. degree from Emory

(Continued on page 420)



# News

## GRADING FOR \$350,000 GREENWOOD MEDICAL CENTER BEGUN

Grading has begun on an Alexander Avenue lot for a \$350,000 Greenwood Medical Center, according to Dr. Stanley C. Baker, Jr., president of the Greenwood Medical Corp.

Dr. Baker says the project will be composed initially of three, one-story, multi-unit brick office buildings. A drug store and other commercial buildings probably will be constructed later.

Initial Medical Center construction is expected to be completed in the early spring of 1962.

The three buildings — and the commercial building when it is constructed — will go up on a lot across from the Alexander Avenue-Spring Street intersection near Self Memorial Hospital.

Dr. Baker says Medical Center buildings will house offices of every type medical specialist except a neurosurgeon and a dermatologist.

Other officers of the Greenwood Medical Corp. are Dr. Phillips Bates, vice president, and Dr. Richard Christian, secretary-treasurer. R. B. Curry, Jr., Greenwood businessman, is corporation business manager.

The center was designed by Jackson and Miller Architects of Columbia and will be constructed by Yeargin Construction Co. of Greenville. Dr. Baker says grading will be done by agreement and contract to the Yeargin firm was let August 1.

A hedge row joins the corporation's lot on the east, Abney Mills automotive shops bounds it on the west.

There will be sufficient room at the rear of the property to construct one or two additional units in the future.

The center will be composed of three buildings, which will be reached by driving through a driveway off Alexander Street into parking areas adjacent to each building.

Dr. J. Roland McKinney, Dr. John H. Kirkland and Dr. Casper E. Wiggins will occupy the office building nearest Alexander Street, which will be located to the rear of the drug store.

The second building will be occupied by Dr. Baker, Dr. William S. Brockington, Dr. Vernon B. Moore, Dr. Guy Calvert and Dr. T. Jackson Wood.

Dr. Paul Garrison, Dr. Bates, Dr. James A. McQuown, Dr. Christian, Dr. George H. L. Dillard and Dr. Caulie Gunnells will occupy the third office building.

The physicians are currently occupying offices in the Academy Apartments buildings. Dr. J. Furman Daniels and Dr. Elbert Adams also are moving into new offices. Dr. Daniels to a building going up on Wells Avenue and Dr. Adams to a new office on Spring Street on a lot adjacent to the Academy Apartments.

Planning of the Medical Center began about one and one-half years ago, Dr. Baker says.

## SPEAKERS BUREAU

The following members of the Association have been added to the list of the Speakers Bureau of the Public Relations Committee:

Dr. J. P. Booker, Walhalla  
Dr. W. R. Wallace, Chester  
Dr. William E. Sims, Jr., Lancaster  
Dr. W. J. Goudelock, Easley  
Dr. C. J. Scurry, Greenwood

Dr. John Crawford Lipsey of Greenville and Dr. William Frederic Young of Sumter were certified as specialists by the American Board of Pediatrics, Inc., in March of this year.

Six new doctors have been approved for staff privileges at Anderson Memorial Hospital, and Dr. O. M. Goodlett, Jr. of Williamston has been added to the staff, according to Hospital Administrator George B. Little. The new doctors are Drs. J. R. Barham, W. L. Gilliard, Charles W. Hinnant, S. T. Haddock, Dr. Vernon Merchant who is associated with Dr. Olin Hentz, and Dr. Harold L. Murray who is associated with Drs. Clyde and Carroll Bowie.

Dr. Hartwell Hildebrand has begun general practice work with Dr. John L. Bundy of Rock Hill.

A native of Cameron, Hildebrand graduated from the College of Charleston and the South Carolina Medical College. After interning a year at the college's teaching hospital, he entered the Air Force and served at the Orlando AFB Hospital, Orlando, Fla.

He and his wife, the former Betty Thurmond of Orangeburg, and their 16-month-old son, Jim, moved to Rock Hill last week. They are living at 736 Hawthorne Lane.

## STATE BOARD OF MEDICAL EXAMINERS OF SOUTH CAROLINA

The State Board of Medical Examiners of South Carolina held written examinations at the Columbia Hotel on June 27, 28, 1961. Seventy-three physicians passed the examinations and have been licensed. There were 66 graduates from the Medical College of South Carolina and 7 graduates from other medical colleges.

They are: Drs. Joel W. Allgood, Liberty; James S. Barr, Greenville; Richard H. Bendt, Charleston; Wesley L. Betsill, Jr., Lake View; Thomas W. Blanchard, North Augusta; Maxcy C. Boineau, Adams Run; William L. Brennon, Jr., Denmark; Algie C. Brown, Greenville; William L. Bruns, Greenville; Henry B. Burton, Clinton; Harvey E. Butler, Jr., Conway; Thomas R. Byrd, Kershaw; Sydney E. Carter, Georgetown; Fountain S. Clare, III, Columbia; John DeV. Compton, Greenwood; Lollice B. Courtney, Aiken; Joseph H. Cutchin, Jr., Easley; Clarence S. Davis,

Jr., Florence; James D. Dennis, Spartanburg; Carla F. DuBose, Easley.

Also, Drs. William W. Duke, Lancaster; William E. Dukes, Honea Path; Julian B. Ellis, Jr., Mt. Pleasant; Skottowe B. Fishburne, Columbia; Joseph F. Flowers, Ehrhardt; James E. Gilbert, Aberdeen, S. Dak.; Hugh C. Godefroy, Grandmere, Canada; William H. Granger, Scranton; Casual D. Hammond, Florence; Alexis C. Higgins, Florence; John P. Jackson, Jr., Greer; Robert E. Jackson, Manning; Carlos A. Jaramillo-Dominguez, Augusta, Ga.; William P. Kay, Jr., Belton; George E. Lipscomb, Newberry; James F. Martin, Orangeburg; Sloan P. Martin, Jr., Anderson; Julian L. Mason, Jr., Marion.

Also, Drs. Bradwell R. McAlister, Charleston; Ann B. McIntosh, Cayce; Edwin McT. Meares, Greenville; Hiram B. Morgan, Jr., Ware Shoals; John R. Morris, Columbia; Richard L. Morrison, Georgetown; David W. Neville, Jr., Newberry; Walter M. Newton, Jr., Bennettsville; Benjamin E. Nicholson, Edgefield; George H. Nutt, Clemson; Daniel R. Pace, Marion; Hans J. Peters, Augusta, Ga.; Lucius C. Pressley, Jr., Chester; Thomas P. R. Rivers, Charleston; Harold E. Ross, Blaney; James E. Rowe, III, Manning; Lawton H. Salley, Orangeburg; Jack M. Smith, Florence.

Also, Drs. William K. Stacy, Jr., Anderson; Alva L. Strickland, Loris; Edgar E. Strong, III, York; Joseph T. Taylor, III, Charleston; Barbara A. Threatt, Rock Hill; Eugene T. Tragus, Spartanburg; Wiley H. Turner, Jr., Edgefield; Richard E. Ulmer, Hartsville; Norman S. Walsh, Moncks Corner; John L. Ward, Rock Hill; William F. Ward, Jr., Sumter; Thomas B. Warren, Jr., Allendale; Sidney H. Westbrook, Rock Hill; Robert L. Wingate, Jr., Columbia; Donald J. Wright, Anderson; Margaret L. Wyatt, Greenville; John J. Zadworny, Columbia.

Dr. Belton Drafts Caughman of Columbia entered into active practice in pediatrics July 1 at his office located at 1517 Hampton Street.

He is a graduate of the University of South Carolina, the Medical College of South Carolina, and completed a residency in pediatrics at the Medical College Hospital in Charleston.

Before beginning his residency training, he was on active duty in the U. S. Navy stationed at Coronado, Calif.

Dr. Mary Tribble Tobin (Mrs. Jos. A.) psychiatrist, Women's Service, Columbia Unit, S. C. State Hospital, recently resigned after having been on the hospital staff since 1954, as announced by the hospital superintendent, Dr. William H. Hall. Dr. Tobin immediately assumed the position of first woman physician at the Veterans Administration Hospital in Columbia.

R. C. Alverson, M. D. and William E. Alverson, M. D. announce their association in the practice of General Medicine. Offices in Professional Building, 122 Victoria Street, Greer, S. C.

## DR. SOSNOWSKI NAMED TO ROPER HOSPITAL BOARD

Dr. John R. Sosnowski has been elected to succeed Dr. R. H. Hanckel on the Roper Hospital Board of Commissioners.

Dr. Hanckel resigned to accept a full-time position on the staff of the Medical College of South Carolina.

A Charleston native, Dr. Sosnowski is a graduate of Clemson College and the Medical College of South Carolina. His internship was served at Roper Hospital and he spent two years in the U. S. Army Medical Corps.

Dr. Sosnowski is assistant professor of obstetrics and gynecology at the Medical College.

As a new member of the board, his first assignment will be to head a group studying the hospital's practical nursing program.

Dr. Edwin K. Fennell announces the opening of his office at 2009 Hampton Street, Columbia for the practice of orthopedic surgery. Dr. Fennell was born in Columbia and educated in the Columbia City Schools. He was graduated from the University of South Carolina and the Medical College of South Carolina. He served his internship at the Methodist Hospital of Gary, Ind., subsequently entering the Army Medical Service where he was stationed at the American Hospital, Paris, France. On discharge from the Army he returned to the Medical College of South Carolina where he completed his specialty requirements in orthopedic surgery. He is married to the former Bette Burn of Charleston and they have three children.

Dr. Richard S. Owings, formerly of Columbia, has returned to Augusta, Ga., to practice pediatric surgery and will have a part-time association with the Medical College of Georgia as assistant clinical professor and instructor of pediatrics and surgery, as well as working with the Pediatric Surgical Section of the University Hospital.

He is a member of the staff of St. Joseph's Hospital, University Hospital and the Talmadge Hospital.

J. Earle Hodge, M. D., Winston Y. Godwin, M. D. announce the opening of their new offices at 701 Market Street, Cheraw, for the general practice of medicine and surgery.

Theodore J. Hopkins, M. D., Weston C. Cook, M. D., C. Tucker Weston, M. D. announce their association in the practice of Orthopedic and Traumatic Surgery at 1410 Barnwell Street, Columbia.

Charles W. Simmons, M. D. announces the opening of his office for the practice of Internal Medicine at 129 Congress Street, Suite A., Charleston.

Raymond Rosenblum, M. D. announces the opening of his office at 96-A Bull Street, Charleston for the practice of Urology.

### DR. A. W. BAILEY ASSUMES POST

Dr. Albert W. Bailey, diplomate of the American Board of Pathology, assumed his duties as pathologist at Tuomey Hospital August 1.

A native of Augusta, Ga., Dr. Bailey received his primary and secondary education there. He took his degree in pre-medicine from Emory University and was graduated from the Medical College of Georgia with the M. D. degree in 1949.

His rotating internship at the U. S. Naval Hospital, Philadelphia, was followed by a residency in pathology at the University Hospital and Medical College of Georgia in Augusta. He has had five years active duty with the U. S. Navy.

For five years Dr. Bailey was a full-time member of the faculty of the Medical College of Georgia, where he held positions of instructor, associate and assistant professor of Pathology. He served as consulting attending pathologist at the Augusta Veterans Administration Hospital.

For the last year Dr. Bailey has been associate pathologist at Self Memorial Hospital in Greenwood. He is a member of the American College of Pathology, the International Academy of Pathology, the Intersociety Cytology Council, the American Medical Association, the Southern Medical Association and the New York Academy of Sciences.

Dr. Bailey is married to the former Dr. Ann L. Anderson of Lithonia, Ga.

### DR. LEON E. HUNT BEGINS PRACTICE

Dr. Leon E. Hunt, a Winnsboro native, has opened a general practice here in Bishopville.

He joins Drs. Herman Denny and Leroy Dennis to become the third general practitioner in Bishopville.

Dr. Hunt was graduated from Clemson College.

He later graduated from the Medical College of

South Carolina. At this school, he held membership in the Phi Rho Fraternity.

Dr. Hunt served internship at St. Louis City Hospital.

Dr. Thomas T. Drake, Jr. of Anderson, who graduated from the Medical College of South Carolina and interned at Baptist Hospital in Memphis, will be associated with Dr. George W. Fort.

### DOCTOR SIMONS HONORED BY LEE HOSPITAL COMMISSION

On May 28th, the Lee County Memorial Hospital Commission presented Dr. Sedgwick Simons a lovely silver pitcher engraved, "To Sedgwick Simons, M. D., in appreciation for fifteen years faithful service to the people of Lee County. Lee County Memorial Hospital Commission."

Dr. L. A. Nimmons made the presentation, beautifully expressing the appreciation of the hospital Commission of which the pitcher is a symbol.

Robert N. Milling, M. D., of Columbia, has joined the medical staff of the South Carolina State Hospital with assignment to the Admission-Exit Service, Columbia Unit, as announced by the hospital superintendent, Dr. William H. Hall. Dr. Milling has recently held the position of officer in charge, Field Epidemiological Research Section, National Heart Institute, Memphis, Tenn. He is a graduate of the University of South Carolina. He is residing with his parents, Mr. and Mrs. R. L. Milling, 4619 Monticello Road, Columbia.

Charles H. Banov, M. D. announces the opening of his office for the practice of internal medicine and allergy at 696 Rutledge Ave., Charleston, South Carolina.

## Book Reviews

*CONGENITAL MALFORMATIONS: A Ciba Foundation Symposium* Edited by: G. E. W. Wolstenholme and C. M. O'Connor. Little Brown & Co., Boston 1960. \$9.00.

This volume contains 12 papers with discussions, together with an introduction by the Chairman, and a long closing discussion summary. The topics covered include studies of the incidence of abnormalities, mongolism, chromosomal changes, teratogenic chemicals, runts, anencephaly, the effects of pre-diabetes and hypothyroidism and hydramnios.

It is one of the most fascinating and thought-provoking books the reviewer has ever read, even when he admits there were parts he did not wholly understand. The vocabulary and mathematics of genetics are difficult for the clinical physician to follow. However, the clinical men participating have kept the

varying subjects focused on the human aspects in all cases. Human experiments with teratogenic drugs are discussed also.

The book is not one for casual reading, but it will repay any one interested in the tragedy of the abnormal child.

James M. Wilson

*A TRAVELER'S GUIDE TO GOOD HEALTH* by Colter Rule, M. D. Dolphin Books, Doubleday & Company, Inc., Garden City, N. Y. 1960. Paper back 95c.

A review of this book appeared in the May issue of the Journal. It expressed an endorsement of the value of the book for the traveling public. Now in paper back form at a low price the work becomes even more useful.



# SOUTH CAROLINA MEDICAL ASSOCIATION MINUTES OF THE ONE HUNDRED AND THIRTEENTH ANNUAL SESSION OF THE HOUSE OF DELEGATES

FRANCIS MARION HOTEL

CHARLESTON, S. C.

APRIL 25, 26, 27, 1961

President — JOSEPH P. CAIN, JR., M. D.

2:30 P. M. Tuesday, April 25, 1961.

Call to order.

THE CHAIR: I will ask the meeting of the House of Delegates to come to order. (The Reverend Dr. Beverly Currin, Pastor of the Episcopal Church of St. Luke's and St. Paul asked the invocation.)

THE CHAIR: While we are waiting on the Credentials Committee's report I have a few remarks I would like to make. First I have this announcement that all the work that you fellows did over last week-end paid off for we have just received word that the Eclectic Medical Bill was killed 61 to 30 on the third reading.

I hope that this year we will be able to keep our delegations more together; you see we have assigned seats and I hope that they will be comfortable and a workable arrangement. Also each delegate has been given, in addition to the material already sent to him at home, another compact of the printed reports, mimeographed copies of the committee reports and other resolutions which you will find useful in referring to as the various reports and recommendations come in.

## Reference Committees

I would like to go ahead now and read over the Reference Committees.

(Reading) Reports of Council and Officers—Dr. E. B. Poole, Chairman, Greenville. He is not present. I will ask Dr. B. F. LaBorde, of Columbia, to take over the chairmanship of that committee. The other members Dr. James A. Hayne, Dr. Grover Sheppard, and Dr. W. A. Wallace. Are they all present? (It was stated Dr. W. A. Wallace was not present)

We will try to fill in these committees as we go through the meeting, have them posted on the board. In case the full committee is not present, then we will expect those members of the committees, who are present, to go ahead and act in their absence.

(Reading) Legislation and Public Relations

Ripon LaRoche, Chairman, Camden

J. A. VonLehe, Walterboro

J. Harvey Atwill, Jr., Orangeburg

Harold S. Pettit, Charleston

George Wilkinson, Greenville

Public & Industrial Health

P. K. Switzer, Jr., Chairman, Union

T. C. Hankins, Dillon

Barney F. Timmons, Hartsville

R. Maxwell Anderson, Charleston

Amendments to Constitution and By-Laws

Frank C. Owens, Chairman, Columbia

Ben N. Miller, Columbia

Halsted M. Stone, Chester

Sam Cantev, Marion

Francis C. McLane, Ware Shoals

These minutes have been edited on instructions of Council. An effort has been made to eliminate the non-essentials. The proceedings are reported verbatim in a fuller copy in the hands of the Executive Secretary. — The Editor.

Insurance, Blue Cross, Blue Shield

John Arthur Sieglung, Chairman, Charleston

George D. Johnson, Spartanburg

Robert S. Solomon, Moncks Corner

William H. Hunter, Clemson

Miscellaneous Business

Robert Clarke, Chairman, Due West

Frank B. Adams, Jr., Sencea

Joseph H. Cutchin, Easley

B. M. Montgomery, Newberry

A. R. Johnston, St. George

THE CHAIR: Do we have a Credentials Committee report at this time?

DR. PAUL S. WATSON, Chairman Credentials Committee: Yes, sir, we have 82 delegates listed, and 64 present, well over two-thirds.

THE CHAIR: Eighty-two (82) delegates listed, 64 present and accredited. I declare that a quorum is present and that we are now in official session.

THE CHAIR: At this time it is a very great pleasure for me to introduce to you your President-Elect for the next year. (Dr. Charles N. Wyatt comes to the rostrum amid applause)

Gentlemen, I am going to say this again Thursday night. I don't have to worry about you fellows being jumped on and egged on and pushed around just like I have been doing for the past year for I know Charlie is going to get right down to it and when he does you are going to get down to it. I feel very much relieved that I am getting rid of this job this year but I feel very good and confident that he is going to carry on the work just like I like to have it carried on. Charlie.

DR. CHARLES N. WYATT: Thank you very much, Joe. I know that taking over this job from this boy is going to mean a lot of digging and when the digging starts it is going to be passed out. I can't assure you that I will be as active as Joe has, he has traveled ten thousand or more miles, but I will come as close to it as I possibly can. I certainly thank you for the honor that has been conferred upon me and expect you to help me make this next year as good as this past year has been. Thank you very much.

THE CHAIR: At this time we are going into an order of business, which is not on the agenda. All of you this year have been interested, one way or another, in the subject known to some of us as re-registration and to others of us as various and sundry adjectives and modifiers, etc. In fact there was so much discussion concerning the subject of re-registration, as it was passed last year at the House of Delegates, that rather than try to have it implemented at this year's session of the legislature it was deemed wise that this be brought before the House of Delegates again for their pleasure. I will now entertain a motion for reconsideration or not, as the House of Delegates sees fit. If there is a motion made for reconsideration, it must be made by a person who voted for the measure last year, otherwise the motion is out of order.

I would like a joint motion, if such a motion is going

to be heard and presented and that is that the problem of re-registration be reconsidered and referred back to the Reference Committee. Do I hear such a motion? If not, I understand that re-registration is approved by all present and that it is to be implemented as voted last year?

DR. WILSON: Mr. Chairman, I move that the matter be reconsidered. (Seconded) (Request made that motion be restated.)

THE CHAIR: The motion was that the subject of re-registration be reconsidered by this year's House of Delegates and it has been duly seconded. (The vote was taken, the Chair ruled that the "Ayes have it" and it was so ordered.) I will refer the subject of re-registration back to the Reference Committee on Legislation and Public Relations.

Now, this is a matter of great importance to every one of you here present; it is a matter about which I have had more correspondence and conversation during the past year than any other one question that I know of. I will call your attention to the fact that when it is brought up to the Reference Committee that it is your duty to go to the Reference Committee and tell them whether you approve or disapprove or whether you would approve it in a different form. If you do not do this then whatever decision is made you will have assented to, by default, so I call your attention to the fact that the Reference Committee will be "Legislation & Public Relations" and we will tell you where that will meet before the meeting is over.

#### PRESENTATION OF RESOLUTIONS AND

##### RECOMMENDATIONS—

THE CHAIR: Now is the time for presentation of resolutions and recommendations from individuals and from county societies. I would like at this time, following the discussion of re-registration, to yield priority of the floor to any county which has resolutions pertaining to re-registration so that we can get them all referred to the same committee. Does any county have any resolution?

##### Aiken County on Registration

DR. G. A. PODA, Aiken (Recognized)

THE CHAIR: We will ask Dr. Podá to read without preamble, simply the resolution, all preambles and discussions to take place at the Reference Committee this afternoon.

DR. G. A. PODA: The Aiken County Medical Society, after due consideration, would like to make this proposal on re-registration.

1. Every person lawfully engaged in the practice of medicine within the state as set forth in Sec. 1356 and Sec. 1363 and every person hereafter duly authorized to practice medicine in this state, shall, on or before January first of each odd year, apply to the Board for a certificate of biennial registration with the Board of Medical Examiners which shall be furnished by the Board, and shall pay at such time of registration a fee of five dollars, provided, however, that any physician who receives his license in the second year of any biennial period shall pay a fee of two and one-half dollars for a certificate of registration expiring on December thirty-first of such second year.

2. A physician in making his first registration hereunder shall write or cause to be written upon the application so furnished by the Board his full name, office and residence address, the number of his state license and such other facts for the identification of the applicant as a licensed practitioner of medicine as the Board may deem necessary, and shall duly execute and verify the same before an officer empowered to take acknowledgment of deeds, and deliver the same to the Board by mail or in person. Subsequent registrations after the first registration need not be upon a sworn application by the ap-

plicant, unless in any particular case the Board may with cause deem the application be made under oath.

3. Any licensed physician who fails or neglects to register prior to beginning practice or by January first of any odd numbered year as required by these provisions, shall be required to pay in addition to the authorized registration fee an additional one dollar for each month he is in default. Should such practice be maintained without registration, such physician shall be subject to a civil penalty, of one dollar per day such practice shall continue, and should same continue for more than one month from date of notification of delinquency the penalty shall thereafter be five dollars per day so long as said practice shall continue, said penalty to be recoverable in an action by the Attorney General of this State.

The penalties provided in this paragraph for failure, neglect or omission of a duly licensed physician to register under this section shall be the only penalties that may be imposed therefor, and the legality of his license shall not be affected thereby and such penalties may for good cause shown, at the discretion of the Board be remitted or compromised. Wilful refusal to comply with this section shall be dealt with as outlined in Sections 1373 and 1374.

4. By notification of the Board in writing, a practicing physician may request he be placed on a "Licensed but Inactive" status for reasons of entering into military or government service as outlined in Sec. 1372 or for prolonged illness or for reason of removing said practice of medicine from this state. Should such physician again resume the practice of medicine in this State, he should so notify the Board in writing of his intent and will then be placed on the "Licensed and Active" status and again shall be liable for the provisions of this section. The Board of Medical Examiners may request such information as deemed necessary to acquaint itself with the practitioner's activities during such absence, and finding no cause outlined in Section 1368 shall automatically register such applicant as outlined in paragraphs 1 and 2 of this section.

5. The Board, on or before October first of each even year, shall mail or cause to be mailed to every registered physician an application for registration addressed to the last known post office address of such physician, or may cause such application to be sent to such physician through the secretary of any duly incorporated medical society. The application shall be such as to contain proper spaces for insertion by the applicant of the information required under paragraph 2 of this section and also such directions as may be required properly to complete the application form. On February first of each odd year, the Board shall have mailed to any physician whose registration application has not been received a delinquent notice, calling attention to paragraph 3 of this section.

6. The Board shall issue to any duly licensed physician of this state, upon his application therefor in accordance with the provisions of this section, a certificate of biennial registration under the seal of the Board of Medical Examiners. Such certificate shall be valid for a two-year period commencing January first and expiring December thirty-first of the second year following except as provided in paragraph 1 of this section.

7. Upon the first of March in each odd year, or as soon as practicable thereafter, the Board shall have published and cause to be mailed to every registered physician in this state a printed list of all the duly registered physicians in this state, which publication will contain a current copy of the Medical Practice Act of South Carolina. On or before the first day of March in each even year, the Board shall likewise have published and mailed in like manner, a supplemental list of physicians duly registered thereunder



in this state since the date of the preceding publication, together with a list of those physicians whose addresses have changed since date of registration. Each such published list shall contain at the beginning thereof these words: "Each registered physician receiving this list is requested to report to the Board directly or to the secretary of any duly incorporated county or state medical society, the name and address of any person known to be practicing medicine whose name does not appear in this registry. The names of persons giving such information will not be divulged."

8. The names of physicians which shall in any year be added by the Board subsequent to publication of its list as aforesaid, shall be reported on request to the secretary of any duly incorporated state medical society of which county medical societies are components.

9. All registration fees collected by the S. C. State Board of Medical Examiners under this section shall be accounted for by such Board.

10. Each licensed physician shall conspicuously display his current and proper registration certificate in his or her usual place of practice at all times. Should a physician change the address of his usual place of practice, he should so notify the Board within 30 days, giving both his former and current address.

THE CHAIR: Thank you, Dr. Poda. That is the resolution from Aiken County Society and it will be referred to the Reference Committee on Legislation and Public Relations.

Are there any further resolutions regarding re-registration?

DR. JOEL W. WYMAN, Anderson, S. C. (Recognized): On behalf of the Anderson County Medical Society, and as delegates from that society, we move that the whole subject of re-registration be tabled.

THE CHAIR: Doctor, your motion is out of order. The subject of re-registration has already come up and it is before the house for reconsideration. You can make that motion in the morning, if you like.

Are there any other resolutions?

DR. WYMAN (Recognized) Mr. President, may we offer this in the form of a resolution?

THE CHAIR: You can offer it in the form of a resolution and it will be referred to the Reference Committee, yes, sir.

DR. WYMAN: May we do that?

THE CHAIR: The resolution from Anderson County Society is referred to the same reference committee on Legislation and Public Relations.

Are there any other resolutions other than those on re-registration?

DR. CHARLES WYATT (Recognized): This is a general resolution from the South Carolina Society of Pathologists which was given to me: The South Carolina Society of Pathologists requests that the committee of the State Medical Society for study of the Coroner-Medical Examiner systems be continued and strengthened rather than discontinued as asked in the latest report of the committee. It is felt by our Society that the complexities of present day medical-legal problems, require consideration of newer concepts such as Medical Examiner systems.

THE CHAIR: That will be referred to the Reference Committee on Legislation and Public Relations.

DR. MICHAEL PATTON, Spartanburg (Recognized): I would like to present on behalf of the Executive Committee of the Spartanburg County Medical Society the following two resolutions:

(The preamble to this resolution was not read by Dr. Patton, but is printed here)

Whereas, it is obvious that there are active and aggressive anti-physician socialistic and possibly communistic propaganda organizations such as those of the American Socialist Party, the labor unions and certain communications media vigorously fighting to

socialize medical practice in the U. S. A.,

Whereas, these organizations utilize distortions, half-truths, deliberate falsifications and partial statements taken out of context in their efforts to attain their goals,

Whereas, medical organizations are employing only efforts aimed at improving public relations at the present time,

Whereas, the public in general is uninformed as to such facts as: the large portion of physicians' productive time given, without thought of compensation, to the care of the indigent; and the larger than average contributions of physicians to civic activities and charities, etc.,

Whereas, the efforts of medical associations toward improving relations are commendable, but are also not sufficient to attain the necessary ends,

And whereas, in order to prevent or even postpone the socialization of medicine, all physicians and others interested in preserving those few freedoms still left to us, must aggressively fight fire with fire

Be It Resolved that the South Carolina Medical Association go on record as recommending to the American Medical Association that the American Medical Association initiate an active and vigorous pro-physician propaganda program wherein the true facts relative to physicians and their activities be brought to the attention of the public, and that the American Medical Association be authorized and urged to use all means available to attain these goals, including the hiring of professional publicity personnel and the purchasing of time on the nation's radio and television networks.

THE CHAIR: Thank you, Dr. Patton, we will refer that to the Miscellaneous Business.

DR. PATTON (Cont.) The second resolution—It is requested through proper channels that legislation be initiated to the effect that a certified copy of the birth certificate of each newborn infant in the State of South Carolina, be automatically mailed, free of charge, to the parents or guardian of the infant after the certificate has been properly processed and recorded.

THE CHAIR: This resolution is referred to the committee on Legislation and Public Relations. Thank you, Doctor Patton.

*Introduction of Officers and Guests of Woman's Auxiliary.*—

THE CHAIR: Gentlemen, it is with a great deal of pleasure that I give you Mrs. George Smith, President of the Ladies Auxiliary to the South Carolina Medical Association, Mrs. Smith.

(Mrs. Smith gave an outstanding report of the work and accomplishments of the Woman's Auxiliary, outlining their growth and thanking Dr. Cain, President, for his valuable information and service through the year, also thanking the Advisory Council and Dr. O. B. Mayer, as well as her unofficial adviser, Dr. Thomas Pitts, and her own husband for giving her to us this year. Her report was enthusiastically received.)

THE CHAIR: I know you all will agree with me that was a wonderful report. The best part about it is that it really happened; she is not just talking. Those of you who have not had opportunity to work with the ladies, who call themselves the Auxiliary to the South Carolina Medical Association, have missed a lot. I have never seen such a bunch of eager workers, who want to do anything we want, you just tell them about it and they get to work. I am sure that next year we will have the same sort of leadership which we had under Mrs. Smith and I would like to take the opportunity to introduce to you the President-Elect of the South Carolina Woman's Auxiliary, Mrs. John Cuttino, Charleston.

MRS. CUTTINO: We are active members of the Medical Auxiliary because we have dedicated our-



selves to our husbands and their profession and we feel by doing female work we keep out of your hair. Through your projects and your program we carry out your advice for what you want us to do that can help you. I am looking forward with a great deal of pleasure to the next year when I will work under the direction and guidance of Dr. Charles Wvatt, whom I love so dearly and have respected so highly for years.



*Officers of the Woman's Auxiliary: Mrs. S. Hayne Taylor, Greenville, treasurer; Mrs. McMurry Wilkins, Greenville, president-elect; Mrs. John T. Cuttino, Charleston, president; Mrs. Peter C. Gazes, Charleston, secretary; Mrs. C. Guy Castles, Jr., Columbia, 2nd vice-president.*

**THE CHAIR:** I would like to have you ladies just stay with us. You know a while ago, imagine my surprise, about 30 minutes before this meeting started when I went into my so-called "presidential suite" and I saw two ladies sitting over there and I thought I had sure earned a bonus (laughter). They said, "Isn't this the meeting of the Student Loan Committee?" I said, "I am afraid not, but you are welcome to meet here if you like." I found out instead of being on the 8th floor in the presidential suite they were supposed to be in the presidential suite of the Ladies' Auxiliary on the 10th Floor.

Mrs. Smith and Mrs. Cuttino, we are very glad to have had you; if you are ready to go we will escort you out and if you would like to stay with us we would be very glad to have you.

**MRS. SMITH:** Thank you very much, it certainly has been a pleasure to be here with you and I will let you know we get even with Dr. Cain on Thursday morning, when he comes to report to us.

(Doctor -----?) **Recognized:** I have a resolution from the Greenwood County Medical Society. We, the members of the Greenwood County Medical Society would like to request that a poll of the members of the S. C. Medical Association be taken as to the present wishes of members of the medical profession as regards to the Social Security System.

**THE CHAIR:** Thank you doctor, I will refer that to the Committee on Miscellaneous Business.

Are there any further recommendations or resolutions? **DR. GEO. D. JOHNSON:** (Recognized) Mr. President, this resolution grew out of a little hassle we had this morning in Council. The subject is "Automobile Accidents."

*Whereas*, automobile accidents continue to cause many deaths in South Carolina, and

*Whereas*, in most of the accidents either speed or alcohol or both are the chief causes, and,

*Whereas*, the penalties for either or both are often so lenient that they offer no deterrent to further similar offenses, and

*Whereas*, our Highway Patrol Officers and local law enforcement officers must feel frustrated when they literally risk limb and life to apprehend the offenders only to have them released with little or no fine or imprisonment, now, therefore,

*Be It Resolved* that the South Carolina Medical Association urge the appropriate State Legislative Committee to require not only the usual tests for alcoholism but also urge that local magistrates impose sufficient fine or imprisonment for gross infractions of the law, and

*Be It Further Resolved* that a copy of this resolution be sent to the State Highway Patrol and the State Association of Law Enforcement Officers."

**THE CHAIR:** Thank you, Dr. Johnson, we will refer that to the committee on Public and Industrial Health.



*Members of the Charleston Auxiliary register guests at the April Convention: Mrs. Leon Banov, Jr., Mrs. William B. Gamble and Mrs. Peter C. Gazes.*

## Reports of Officers

The Executive Secretary, Mr. Meadors. Mr. Meadors is in Columbia. He is on his way back by plane, he will be here soon. He called me a while ago to give you the news of the legislative victory and I am sure he will be here before we adjourn to give you his report.

We will now have the report of the Secretary.

**DR. ROBERT WILSON, Secretary:** (Reading)

Mr. Chairman, Members of the House, during the past year as Secretary of the Association I attended the Interim Meeting of the American Medical Association in Washington in November 1960. The most important topic for discussion at that time was implementation of the Kerr-Mills Bill by each state. This requires legislative action and appropriation by the Legislature but its benefits are so far reaching and profound that the State Medical Association should do all in its power to further such action.

Routine activities in the internal affairs of the Association are largely handled by the Executive Secretary, and to him the Secretary is indebted for his efficient management of these details. One of the duties of the Secretary is to act as a liaison officer between the Governor's office and the Association, and appointments by the Governor to the various Boards, on nomination of the Association, are often somewhat confusing. However, at the moment these appointments seem to be clear and in good order.

The Secretary acts as the Secretary of Council and most meetings have been attended. The Secretary

also has charge of placement service for physicians in the state and all such inquiries have been properly acknowledged. However, for this service to be of much value the Secretary is dependent on information from physicians in all parts of the state regarding their professional needs, and opportunities, and no such service is of much value unless the Secretary is kept apprized of this type of data.

I would like to remind the House of Delegates that it has been the policy of the South Carolina Medical Association to present a special award, a 50-year pin, to those physicians, not necessarily members of the Association, who have been in the practice of medicine in the state for half a century. A supply of these is in the care of the Secretary. They are usually presented to the member by the Councilor at a regular county society meeting, and if you will let me know to whom such an award is due, I shall be glad to forward a pin to the Councilor.

I would further stress the absolute necessity of all members of the Association keeping watchful vigilance on proposed legislation affecting physicians, both on state and national levels, and to be prepared to take appropriate action at a moment's notice.

Again I would like to acknowledge my gratitude to the House of Delegates for the opportunity of having served you as Secretary for the past year, and for this privilege I thank you all.

THE CHAIR: Thank you, Dr. Wilson, this report of the Secretary will be referred to the Committee on Reports of Council and Officers.

We will now have a report from our Treasurer, Dr. Howard Stokes.

DR. HOWARD STOKES: Mr. Chairman, Members of the House of Delegates, please refer to the brochure that has the pictures of Joe Cain and Dr. Workman on the front, you will find essentially my complete report. Looking down to the bottom of the left hand column you will find the revenue for the year \$124,743.00. This included \$30,624.00 collected for and remitted to the A. M. A. \$6,207.85 collected and sent to the A. M. E. F., as well as \$6,357.50 designated for the Permanent Home Fund. Membership dues in our state association amounted to \$34,575.00 and funds received from advertising in the *Journal* were \$39,518.92. I might add this was approximately \$5000.00 less than it was last year, and this will be touched upon by the Editor of the *Journal*.

The excess of revenue over expenses for the year was \$13,797.08. (This figure was adjusted in Reference Committee meeting to read \$12,797.08 as shown on printed report of the Treasurer, last figure, righthand column.)

As of December 31, our investments amount to \$77,874.55. Now, if you will go back up to the top of your Balance Sheet, the lefthand side, you will find our investments which read as follows: \$10,585.06 in the Peoples Federal Savings and Loan Association, \$47,547.61 in Investors Mutual Fund, \$19,740.88 in the Investors Stock Fund, which last item represents the accumulated funds for the Permanent Home, making a grand total of \$77,874.55. I think you will be pleased to know that as of December 21st the Association had a Bank Balance of \$13,269.54. Thank you.

The Report of the Treasurer  
South Carolina Medical Association  
Florence, South Carolina

Balance Sheet  
December 31, 1960

Assets

Current Assets:

Petty Cash \$ 205.00

Bank	13,269.54	
Accounts Receivable	2,729.26	
Total Current Assets		\$ 16,203.80
Investments:		
Peoples Federal Savings and Loan Assn.	10,586.06	
Investors Mutual Fund	\$47,547.61	
Investors Stock Fund	19,740.88	67,288.49
		77,874.55
Fixed Assets:		
Furniture and Fixtures		8,340.40
Other Assets:		
Deposits		3.00
Total Assets		<u>\$102,421.75</u>

Liabilities

Current Liabilities:		
Withholding Taxes		\$ 245.38
Surplus		
Balance	\$89,379.29	
Excess of Revenue over Expenses	12,797.08	
Total Surplus		102,176.37
Total Liabilities & Surplus		<u>\$102,421.75</u>

Statement of Revenue and Expenses  
January 1, 1960 to December 31, 1960

Revenue:		
A. M. A. Dues	\$30,625.00	
Membership Dues	34,365.50	
Subscription Dues	3,903.50	
A. M. E. F. Receipts	6,207.85	
Advertising	39,518.92	
Permanent Home Fund	6,357.50	
Miscellaneous Income	1,475.50	
Benevolence Fund	50.00	
Directory of Members	216.00	
Interest and Dividends	1,713.36	
Gross Revenue		\$124,433.39
Less Expenses:		
A. M. A. Conventions	\$ 1,528.22	
Dues and Subscriptions	368.40	
News Letter	447.10	
Insurance	711.49	
Office Supplies	810.41	
Journal:		
Printing and Expense	\$30,373.51	
Pro-rated Salary	304.00	30,678.51
Salaries:		
Editor	3,000.00	
Exec. Secretary and Counsel	10,000.00	
Secretary, et al	7,867.50	20,867.50
Postage		859.90
Tel. & Telegraph		1,578.48
Travel Expense		1,741.71
Audit and Legal		620.19
Public Relations Expense & Conferences		746.12
Rent		1,200.00
Taxes - Payroll		365.15
Refunds & Transfers		1,538.75
Misc. Expense		807.86
Amer. Education Found.		9,178.00
President's Office		1,220.99
Woman's Auxiliary		1,224.83
Maternal Welfare Com.		200.00
Com. on Infant & Child		



Health	115.92	
Secretary's Office Expense	250.03	
Treasurer's Office Expense	150.00	
Com. on Public Relations	2,517.27	
Legislative Services	646.52	
Conference on Aging	87.96	
Benevolence Fund	550.00	
A. M. A. Dues Remitted	30,625.00	
Total		\$111,636.31
Excess of Revenue over Expenses		\$ 12,797.08

THE CHAIR: Thank you, Dr. Stokes, this report will be referred to the Committee on Reports of Council and Officers.

We will now have the report of Dr. Waring, Editor of the Journal. In addition to his report as editor he will report on the Public Relations Committee of which he is Chairman, Dr. Waring.

DR. JOSEPH I. WARING: Mr. President,

Report of the Editor of the Journal

During the past year, certain physical changes have been made in *The Journal*, including a new cover design, a little stronger cover paper, a different type of binding, and the use of lettering the spine of each issue so that it may be more readily identified.

Material still comes in somewhat sluggishly, but we have been fortunate in being able to keep a supply of articles for about three months ahead of schedule. This is very comforting to the editor, but sometimes it is a matter of question to the author who wonders why his article does not appear immediately upon acceptance by *The Journal*. Editorially, it would be very nice to have an even longer list of waiting articles, as is customary with a great many journals of states whose medical population is more eager to appear in print. *The Journal* is glad to receive a regular contribution of material from Dr. Dale Groom, and the irregular contributions from a number of other faithful supporters. To our regret, we get relatively little material from county societies in the way of news, announcements, etc., and *The Journal* could perform a useful function in making such matters public.

Through the kindness of some of our members, *The Journal* has been able to maintain a Book Review department, and it continues to solicit offers for reviews of books. How popular this portion of *The Journal* is with the readers is still a question. Indeed, it is always a question as to who thinks what about *The Journal* and what particular portion of it appeals to the bulk of our membership. The Editor is pleased to find that we have not infrequent requests from other journals for reprinting some of the original articles, and that even the editorial page is occasionally quoted.

A change in our position in regard to advertising has come about in the last year or so, very probably because of the Kefauver probings in the pharmaceutical manufacturers. There has been a very noticeable decline in the amount of advertising done in state journals, to the extent of perhaps twenty per cent or more. This is reflected in our journal and in the others, and while the situation is not critical, it must be a matter for careful consideration, as the financial basis of our journal is received from advertising. With lessened income it may be necessary to have a smaller journal. However, no change is anticipated at present, as there is an adequate support at this time.

The Editor would welcome any offers of assistance in any part of the operation of *The Journal*. Indignation, criticism, insult, and even an occasional kind word, would be welcomed. They all create material for publication.

THE CHAIR: Thank you, Dr. Waring, this report will be referred to the Committee on Reports of Council & Officers.

We will now hear your report as Chairman of the Committee on Public Relations.

DR. WARING: As you may recall, the duty of attempting to create and maintain and promote public relations was added to the Editor's activities a couple of years ago and we have endeavored to do what we could without being quite satisfied, that we have done as much as we might have done.

Report of The Committee on Public Relations

During the past year, the committee has pursued its activity in the way of production of television programs which covered a number of subjects of mutual interest to the public and the profession. These programs have been well received and the cooperation of the members of the Association who have been requested to participate has been very good in most places. There has been some favorable comment by the press on this series, and most of the television stations have been very agreeable to the donation of time on the air for the production of the programs.

Inasmuch as the demand on the various panels has been perhaps a little more than might be comfortably sustained, it was decided that the television program be gradually tapered off, with only occasional productions as circumstances indicated, and that the efforts of the committee might be directed more vigorously toward getting up a Speakers Bureau which would include the whole state. The purpose of this Bureau was to make available to local civic clubs, social groups, and other organizations the services of a physician who would talk about the same sorts of subjects which have been used on television. A number of suggested speeches have been prepared, mimeographed and distributed to those counties which have expressed an interest in cooperating in this program. These speeches were not intended to be delivered verbatim, but were to be used as guides for the speaker who might modify them according to his own ideas and local application.

During 1960, twenty county societies agreed to participate in the program and since then we have had two additions to the list. Most of the larger counties have entered into the effort.

As it was found that many of the local speakers or public relations appointees were somewhat loath to invite requests for their talks, a method was adopted whereby a list of miscellaneous possibly receptive organizations of various kinds was obtained from the Chambers of Commerce of the various localities, and these organizations were notified that the speakers were available upon request to the local representative of the program. This approach has appeared to stimulate activity, and while the committee has no statistical report to offer, since it has been unable to obtain much information from the local representatives, it feels that the effort has been well received and might well be continued.

The subjects of the talks have been varied; ranging from such things as accidents, poisoning, prevention of heart disease, etc., up to the more political subjects having to do with the care of the aged, and the Forand-type legislation. The committee is more than anxious to have criticisms, suggestions, and comments from the members, and to know whether its approach is agreeable to the Association.

The committee has also prepared for distribution to new members of the Association a pamphlet which contains a brief description of the activities of the Association which, with material from Blue Cross-Blue Shield and a number of pamphlets obtained from the American Medical Association, is to be distributed in a package to each new member as he joins. It is felt that this information may be worthwhile to many, especially to the younger members who have not too much knowledge of the activities of organized medicine.



The committee has also proposed and has received approval from the officers, that the new booklet prepared by the A. M. A. on the cost of medical care be distributed to all members of the Association and has sent a suggestion along with the booklet that those members who care to do so might accomplish quite a bit in the way of public relations by distributing these booklets to their patients. This distribution has not yet been effected, but should be accomplished very soon through the Executive Secretary's office.

THE CHAIR: Thank you, Dr. Waring.

This report is referred to the Committee on Miscellaneous Business.

## Report of Council

The next report that we have is from Chairman of Council, Dr. James H. Gressette.

DR. J. H. GRESSETTE, Chairman of Council: Mr. Chairman, the Chairman of Council's report is kind of like a trash basket, it catches a little bit of everything, you know, you review, you go back over some things that you think you have already finished.

Council recommends that we have an amendment to the By-Laws, Section 3, which pertains to Emergency Medical Care and in this we would set up a committee. This would have to be an amendment of the By-Laws, and it will state how the members of this committee will be selected. I can read you this sheet of paper with it all in detail but I think we will just refer it to the committee.

DR. GRESSETTE: Another amendment to the By-Laws, Section 3, which has to do with an advisory committee to the Department of Public Welfare. This is a new committee, therefore we have to have an amendment to the By-Laws. And this would be an amendment setting up staggered terms for this committee to advise with the Department of Public Welfare at a state level.

Then we have No. 3, which is another amendment to the By-Laws, Amendment Chapter 8, Section 4, we propose that the Scientific Committee shall consist of three members, together with the President and Secretary, ex officio. The said three members shall be appointed by the President, and we recommend that these be staggered so that we can have some continuity to the Program Committee. We think that will make it much easier in procuring good speakers for this program.

THE CHAIR: These amendments, this portion of the Chairman of Council's report, will be referred to the committee on Amendments to the Constitution and By-Laws.

DR. GRESSETTE: Your Council has had a very active year. You know we appropriated money and activated the Benevolence Committee, we appropriated only a small amount of money, in Dr. Billy Smith's estimation, until we could get organized. We appropriated the sum total of thirteen hundred (\$1300.00) dollars for the past year's operation of that committee until it could be further studied.

We have had a great many meetings pertaining to Civil Defense and I am glad to be able to tell you at this time you are fortunate in having Dr. Bushouse who is with us today to be our Civil Defense officer. He is back there by Dr. Wyatt. (Dr. Bushouse is asked to stand to let the doctors see him and is applauded)

We have had various other activities such as providing money for this coming year for the medical students to go to the student A. M. A. meeting. You are going to provide the cost of one delegate to that meeting which is the same amount which the Medical College provides for its delegate.

The Council has under way a study of the need of scholarships or grants for medical students and residents to try to see if we can make this field of medi-

cine more interesting and more attractive to the young man who has his eye on a profession.

We have a committee activated to analyze and study the salaries of all who are on the payroll of your society and to report to Council whether they think they are too high, or too low or what not. And then we had this morning a very interesting report from the Cornell Automotive Crash Injury Research Committee that was presented by Dr. Moore and Dr. Sheriff with Mr. Marsh there, and this was quite a lengthy report. (To the Chair)

And then we have before the legislature at this time a South Carolina Adoption Law that Council thinks should be pushed by the society so that it will become law because we have none pertaining to how children are adopted.

We have had in the past year a very unusual and unique experience, the first time I have had such a great pleasure of being on the sideline watching one of our members go up the ladder in the officialdom of the A. M. A. Council is, and I know the House of Delegates is, very proud of Dr. Julian Price. He is now Chairman of the Trustees of the A. M. A. and in our humble opinion we think that he would make an excellent president-elect.

Council was petitioned by the Columbia Medical Society that they establish a first aid station at the State House during the time the Legislature is in session. This was discussed at length by Council and it recommends to the House of Delegates that they further study it and see if it is wise to establish such a first aid station at the State house.

Then we had another unusual situation. Very often we find among our members one who is very gifted and one who has an unusually keen sense about our needs and who recognizes whether we are wandering off of the straight and narrow, or whether we are getting a little on the liberal side or whether we are actually staying strictly on the conservative side, and Council has asked me that I ask your indulgence while I introduce to you one of our own, Dr. Tom Parker, and he is going to make us a statement regarding some literature "The Challenge to Socialism." Dr. Parker.

DR. TOM PARKER, Greenville, S. C.: Thank you gentlemen. Dr. Gressette, I want to speak to you about the "Challenge to Socialism" which is a medical news letter published by Dr. Marjorie Shearon, in Washington. Dr. Marjorie Shearon is a PhD. I believe in Chemistry. In 1930 she was an employee of the Social Security Department in which she worked under Isadore Faulk and W. J. Cohen, who has just been nominated and returned as Asst. Secretary to the Department of Education and Welfare. She finally got fed-up with what went on in that Department and resigned whereupon she was employed as legislative assistant by Senator Taft and she served under him in his office until there was a change in national parties and he ceased to be chairman of his committee, so he lost her services. She then started publishing this news letter which she has published ever since when Congress is in session, something like 30 or 40 issues a year, almost weekly when Congress is in session. It takes up matters dealing with medical legislation and social security. She is on our side. She has lost her husband with cancer this past year and she has always maintained that she wished to have freedom of choice of physicians. She and her husband published this letter together, they have sacrificed their life's savings fighting for the practice of private medicine. Her paper is not only informative but it is also reliable and I would like to suggest to the Association that it would be very helpful if the society saw fit to subscribe to her paper, or at least the members of Council. They would find it a source of reliable information on pending legislation and would

find things that they would not see in other places. THE CHAIR: I refer the balance of Dr. Gressette's report, including the remarks by Dr. Parker, the Chairman will please take note of his remarks, to the Reference Committee on Reports of Council and officers.

I will ask Mr. Meadors if he will come up to the rostrum a minute I want to ask him a question. (Applause when Mr. Meadors goes to the rostrum) Jack, I presume this applause is for you, I want to ask you how did you do it?

MR. MEADORS: The answer is, Dr. Cain, I didn't do it, you gentlemen and the other doctors in the state did it.

THE CHAIR: Gentlemen, we will now hear the report of the Executive Secretary, if he is ready.

### Report of Executive Secretary

MR. MEADORS: Mr. President and gentlemen of the House, it is always a pleasure to have the opportunity to come and make my annual report to this body and I do have a little unique and different pleasure in doing it this afternoon. We will come to that phase of it a little bit later.

It has never been our custom to burden the House of Delegates with a detailed report of the number of pieces of correspondence and other written material issued from our office, or other minute details of its operation. We have, however been guilty of some lengthy repetition in reporting on rather routine matters which vary little from year to year.

Because of the profession's interest in national legislative developments and those of the same type within the State, the volume of paper work has been considerably more than usual within the past year, and we have had more personal contact with members of the Association within the counties, due to an effort to cooperate with an energetic President in his extensive visitation program.

Your Association continues to grow in numbers and in the extent of its general activity. Forty-five new members have been added to the roll since January 1, 1961, for a total net membership of physicians in good standing at the present time, after deducting the few deceased and those who have moved out of the State, of 1559. The dues of more than 1050 members have been paid since the beginning of the year, both to the state Association and to the American Medical Association.

In the interest of brevity, the balance of this report will be devoted to information concerning specific activities considered to be of chief importance with which we have been engaged since the last annual meeting.

Other than the day-to-day conduct of the administrative business of the organization, the efforts to cope with Forand type legislation, in conjunction with efforts on the part of A. M. A. and other state associations, has demanded decidedly more interest and attention than any other one undertaking during the past year. The members have been kept generally informed on this activity through the pages of the *Journal*, the *Newsletter*, and otherwise. The American Medical Association, through its recently created Field Service Department, has devoted a great deal of time and effort in this area, and we have endeavored to cooperate and coordinate our activities with that program to the fullest possible extent. Several conferences on the subject have been attended, the most recent having been held in Chicago in March. The purpose of that conference was to review the profession's situation throughout the country, to assess so far as possible the extent of the support we have in the Congress in opposition to the provision of medical care benefits under the Social Security system, and outline the program for maintaining and

increasing that support. We were pleased to be able to report at the A. M. A. meeting, attended also by the President Elect, Dr. Charles N. Wyatt, and Dr. Don Kilgore of Greenville, that we believe we can depend upon five Congressmen and certainly one Senator from our State to go along with the viewpoint of the medical profession.

Tied in closely with this effort has been the cooperation and development of further interest in other means of taking care of whatever needs actually exist for providing medical and hospital care for people over 65, in the hope, thereby, to make the Social Security proposals unnecessary and lessen the demand. Among the conferences attended last fall were two conducted by the State Legislative Committee on the Care of the Aging. That Committee, created by a Joint Resolution two years ago, conducted a statewide survey and, at the meeting held in Columbia in October for the purpose of framing the State's recommendations to the White House Conference in January, medicine's position was well represented; and a motion proposed by Dr. Cain, President of the Association, was adopted, expressing as the position of the entire meeting, views in line with those of the medical association.

Special emphasis has been directed toward securing implementation by necessary state legislation of the Kerr-Mills Law in South Carolina. After preliminary conferences with the Superintendent of the Dept. of Public Welfare, through which such a law would be administered, officials of the Association accompanied the Superintendent, Mr. Rivers, when he appeared before the Ways and Means Committee of the House of Representatives in Columbia for the purpose of presenting the proposal which would accomplish the desired purpose. Several weeks elapsed before the Committee acted, during which time our office was active in securing contacts with each member of the Committee and transmitting information developed from accurate studies and estimates with respect to South Carolina's needs, and we are pleased to report that the efforts of all those concerned, resulted, during the past week, in favorable action by the Committee, and the introduction on Tuesday, April 17th, of a Joint Resolution sponsored by the Ways and Means Committee, which, if adopted, will implement the Kerr-Mills Law in this State. Under this proposal, the amount deducted from the counties' share of the income tax would be increased from \$06 per capita, as provided under the Spruill Bill two years ago, to 50¢ per capita, all of the amount to be turned over to the Department of Public Welfare and used with federal funds, according to the need throughout the State. The amount thus supplied would be supplemented by four times as much from the federal grant, and would be used to provide hospitalization, nursing home care, and out-patient diagnostic services to persons over 65 with annual incomes of a thousand dollars or less. The studies indicate that under this arrangement there will be made available to every county in the state more money for these purposes than the total that would be withheld from the county's share of the income tax, if the law is adopted. In view of this favorable financial situation, we are very hopeful that the proposal, sponsored as it is by the powerful Ways and Means Committee, may be adopted this year. It did not progress last week but may be reached for debate and action in the House within the next few days.

Within the past several years, it has been necessary to devote a disproportionate part of each annual report to discussion of the problems relative to cult practices. Although it would have been too much to expect that we could have escaped the difficulty this year, it did not develop until late in March, when Representative C. A. Mitchell of Oconee County



succeeded in having the House Committee on Military, Public and Municipal Affairs, of which he is a member, introduce as a Committee Bill, one that undertakes to define eclectic medicine, and which would provide him individually (since he is the only one in the State meeting the requirements laid down) to practice this nebulous branch of the healing arts. Our opposition was begun immediately. The necessary objection was made to have the Bill put on the contested calendar, and the officers of the various county medical societies and other physicians were alerted promptly. The bill was finally reached for debate on last Thursday morning and, despite the effort that had been made, and which was second only to that asserted in the original campaign to repeal the Naturopathic Law in this State, the Mitchell bill was passed by a vote of 55 to 40 on second reading. A renewed and intensified effort was immediately instituted over the week-end to oppose the measure when reached for third reading in the House.

Well, I can omit the last sentence in that paragraph now and bring you immediately up-to-date. And that is why I didn't discuss this before beginning the formal report. The bill was up for third reading this morning and was reached about one o'clock. It was debated in some considerable measure and I would like to say this—it is very fitting that our hosts here at Charleston, were the ones whose representatives carried the ball for us. Mr. LeaMond was on his feet immediately when the bill was called for consideration and made a motion to table the bill. Before doing so he took the floor and in a very forthright, frank statement, which in my opinion was the ideal approach for it, stated very frankly that last week this house, the House of Representatives, entirely or principally as a matter of friendship for one of their colleagues passed on second reading a piece of legislation which, as they all knew, should not have been passed. He pointed out his feeling and his sympathy for the fellow member but called to the attention of the members of the house that theirs was a more responsible position or situation, and called very strongly for opposition to the bill at this time and at the conclusion of his remarks made a motion to table it. At the request of several members he withdrew the motion long enough for some statement to be made, for of course, you know a motion to table cuts off debate. He withdrew his motion for the purpose of permitting statements and there were quite a few of them. I could not call all the names now and so there is no use to call any. Those who opposed it—there was considerable argument about what the actual position of the medical profession is. Mr. Mitchell had circulated a good many reports about the action in Oconee County and fortunately we were able in that we were sitting right near Mr. LeaMond in the back of the hall, to assure him that the Oconee County Medical Society in meeting last Tuesday evening had reaffirmed their position of complete opposition to the measure. After considerable further debate Mr. Augustine Smythe, also from Charleston, took the floor and made a very effective and spirited speech against the bill. Mr. LeaMond renewed his motion to table; demand for a roll call was made and the final count was 61 to 38 to table the bill, so that is that for this year; we don't have to worry about that particular bill any more for this year. That is a lot better than having it referred back to the Committee, which would have been the next step if that motion had failed, which a number of them were trying to get them to do. If that had been the case we would have had continual further difficulty to keep in touch with it.

We met regularly with the Insurance Committee, interviewed insurance company representatives and offered advice and assistance in consideration of the several programs of insurance proposed.

Since December, we have accompanied the President, Dr. Cain, on all of his visits to the county medical societies, and took advantage of the opportunity for personal contacts with the members at their local county meetings. While with one or two possible exceptions when it was absolutely unavoidable, we have been somewhat more difficult this year because one of the county organizations, we have had the opportunity this year to visit two or three of the county societies for the first time since our connection with the Association.

So far as we know, and with the exception of the legislative difficulties outlined above, the Association's affairs have been running smoothly and the climate of its various areas of interest is entirely favorable. Physical arrangements for the present meeting have been somewhat more difficult this year because of the facilities of the hotel. We regret that it was impossible to accommodate some prospective exhibitors who have been with us for a number of years, because of lack of space.

We cannot close the report without urging all members of the House to visit the exhibits and give the various company representatives a reasonable part of your time and attention. We would earnestly request, also, that you pass this request along to other members of the Association who are not here present but who will be arriving within the next few days.

Our usual thanks and appreciation for their courtesy, understanding and cooperation are extended to Dr. Robert Wilson and Dr. J. Howard Stokes, the Secretary and Treasurer, respectively, to Dr. Gressette, Chairman of Council, and to the other members of that body. Our Association with the President, Dr. Cain, has been one of the longest in an official capacity that we have had, and it is a source of personal regret that he concludes with this meeting his official activities, so capably handled and directed, first as Chairman of Council, and now as President of the organization. We wish especially to extend our sincere thanks and appreciation and that of the administrative staff, for his leadership, interest, his valued advice and cooperation in many of the difficult tasks undertaken since we have been connected with the organization.

M. L. Meadors

**THE CHAIR:** Thank you, Mr. Meadors. We would like to have you post the meeting places of the various reference committees.

At this time I would like to check to be certain my Chairmen of the Reference Committees are present: Pierre LaBorde, Ripon LaRoche, P. K. Switzer, Jr., Frank Owens, John Arthur Siegling, Robert Clarke (all were present) (It was stated from the floor that Dr. Charles R. May, Sergeant-at-Arms would not be present.)

I would like the Chairmen of these various reference Committees to pay particular attention to these referrals to their committees and check with the membership and if any members of their committee are absent we will appoint others for them.

I would like to refer Mr. Meadors' report to the Reports of Council and Officers.

Next we will hear from the Delegates to the A. M. A. I would like to extend the floor to our senior delegate Dr. William Weston.

### Delegates to AMA

**DR. WILLIAM WESTON:** I gave a brief report to Council today. Dr. Waring has published both of the important items in the *Journal of the South Carolina Medical Association*, so I will have very little to say. In regards to the Mills-Kerr Bill that will be brought up elsewhere, and in regards to the Keogh-Simpson Bill, the Jenkins-Simpson, we do not stand much



chance of having that passed; that was a bill to allow the doctors to take off a certain amount of income if invested in insurance. We are considered as a minority group, which we are, and it would be a favored few, so my congressman, John J. Riley, says it will stand very very little chance of passing. Mr. President, I believe that is all at this time.

**THE CHAIR:** Thank you Dr. Weston. We will refer that report to the Committee on Council and Officers. We will now hear from Dr. George D. Johnson our other delegate to A.M.A.

**DR. GEORGE D. JOHNSON:** Mr. President, delegates, last year I was honored by being elected to the Council on Constitution and By-Laws of the American Medical Association. I say that only because when Billy and I receive an honor in the American Medical Association it reflects credit and honor to the South Carolina Medical Association. In conjunction with this new duty last week I had to go to Louisville. I was asked to go to Louisville to a medical legal symposium and I wish every doctor and every lawyer in South Carolina could have been there. This is not the place to go in great detail into what took place but there are a few points that doctors seem to forget: first, you and I practice under law, we receive our diploma under law, our practice is delineated by law and when a patient has had something happen to him that his doctor wouldn't have happen for anything on earth it is up to you and me to testify in the patient's behalf if we want to see justice done. Remember you and I carry malpractice insurance for two reasons, not only to protect us but to protect our patients when an accident is made. I wish you could have heard Mr. Louac, who is a partner of Mr. Berry, the famous man from San Francisco, who has so successfully sued so many doctors. The impressive thing to me was for every case of malpractice and negligence that you and I hear of, there are scores and scores that are turned down by your and my lawyer friends. In other words we most likely don't have near as good rapport with our patients as we think we do.

These recommendations that I am going to read are a summary of what transpired in the American Medical Association House of Delegates and they are recommendations and suggestions only:

#### Recommendations for State and County

##### Medical Societies

1. All State and County Medical Societies should recommend names of qualified physicians for the various Councils and Committees of the American Medical Association. Such names, with a short biographical sketch, should be sent to Dr. Blasingame of the Headquarters office. States should publicize this information for the benefit of all physicians.

2. It is recommended that all constituent and component medical societies should consider developing liaison committees of state associations and county societies; that they be given increased responsibilities for exchange information and liaison; and that they be available equally to all legally constituted prepayment and/or insurance plans which do business in their respective areas.

3. It is recommended that all state associations bring to the attention of their members the suggestion for improvement in Veterans' Home-town Care, Free Choice Veterans' Care, Non-service-connected Admission Policies and State Association Action. It is further recommended that the public be informed of these policies.

4. All component medical societies should take an active interest in (a) assistance programs; (b) the whole complex of welfare medical care; (c) possible future developments.

5. All constituent medical associations should undertake a study of the need and desirability of establish-

ing committees to assure the rendition of good medical care, to eradicate abuses of voluntary health insurance benefits, and to provide methods for the resolution of problems which arise in the provision of medical care to the public. Such action will identify the medical profession even more closely with its concern for the quality and cost of medical care and the utilization of benefits provided through voluntary health insurance mechanism.

6. The House of Delegates directed the Board of Trustees and the Council on Medical Service to assume immediately the leadership in consolidating the efforts of the American Medical Association with those of the National Association of Blue Shield Plans, the American Hospital Association, and the Blue Cross Association into maximum development of the voluntary non-profit prepayment concept to provide health care for the American people. Similar leadership should be undertaken to coordinate the efforts of private insurance carriers through conferences with their national organizations. Where feasible, efforts should be made to cooperate with other types of medical care plans, other professional groups and representatives of industry, labor, and the public at large.

7. Constituent associations should make every effort to effect the transfer of all professional services possible from Blue Cross Plans and all other hospital plans to Blue Shield or that section of insurance plans providing for professional services wherever such situations exist.

8. The House of Delegates encourages the state and local medical societies to promote High School Scholarship Award programs in their respective areas.

9. All state associations should cooperate with the appropriate state officials and provide leadership in implementing the provisions of the Kerr-Mills Bill.

10. State associations should nominate interested and experienced physicians for the position of "key man". This is the key man in state legislative affairs. The Woman's Auxiliary should be encouraged in their effective campaign assisting physicians.

11. State and County associations and societies shall participate in the promotion and publicizing of the scholarship and loan program proposed by the special study committee of the Council on Medical Education and Hospitals. The program will clearly assist in securing highly talented individuals whose ability and leadership in all areas of medicine will be fostered and at the same time will bring needed financial assistance on a broad basis to medical students under a system in keeping with the association's belief in individual responsibility.

12. Expansion of membership in the A. M. A. by state and county medical societies is important. We must actively seek to add all those currently outside our ranks so that we may truly represent the strongest, most united front possible as we face our responsibilities to the American people.

The Judicial Council has said many times and repeats here for emphasis: "The local medical society is the strong right arm of the medical profession. As it demands of its members respect for medicine's principles of ethics and as it demonstrates that its members are of high ethical stature, the public will respect and admire the profession of medicine and its members. If the county societies fail to require adherence to ethical principles, public admiration and respect for the medical profession will be lessened."

**THE CHAIR:** Thank you, Dr. Johnson, this report will be referred to the Committee on Reports of Council and Officers.

Gentlemen, we now come to the Committee reports. Some of these reports have been published in *The Journal*. At this time I will give the Chairman of these committees an opportunity to make a supplementary

report if he so desires. Otherwise the report will be referred by title to the appropriate committee.

#### *Supplemental Report of Insurance Committee*

Since submitting our former report, the Committee has had conferences and another meeting, the results of which are included in this Supplemental Report.

(1) After careful deliberation and discussion, the Committee decided to approve for recommendation a program of group life insurance for the members of the Association offered by Messrs. J. B. Talbert and O. E. Stubblefield, and underwritten by Home Security Life Insurance Company. While it is recognized that the plan is generally similar to the one offered members of the Southern Medical Association and, perhaps, other professional groups, this particular program contains desirable features which we have not found included in the others. First, the policies will be individually issued and guaranteed renewable and non-cancellable so long as the physician remains a member of the Association. During the initial enrollment period, the coverage will be available to all members of the Association in good standing without evidence of physical condition, provided a minimum of 40% of the membership participate. Following the initial period, of course, evidence of insurability will be required. Premiums compare favorably with those of other plans we have investigated.

(2) Also approved is a plan for major hospital expense coverage offered by Commercial Insurance Company of New Jersey, represented by the General Agency, Mr. John B. Cappelmann, Jr., of Charleston. This plan was proposed especially for the medical profession and it therefore offers reimbursement for major hospital rather than professional medical expense. Included is a substantial item for nursing care and other features. The premiums are considered very reasonable for the benefits offered. The plan can be put into effect if as many as 100 members of the Association subscribe and if 50% of the membership participates, will be made available to all members engaged in active practice regardless of medical history.

The same company and representatives also have an excellent program of disability coverage which they seek permission to offer, along with the policy for major hospital expense. This is not designed in any way to supplant the Association's present program with Educator's Mutual Insurance Company but is intended for those who may want additional insurance of this type. While the major hospital expense program is the main project of Mr. Cappelmann, and his principals, they propose to put that program into effect only if they are given the right to solicit also the disability coverage.

(3) Finally, the Committee made further study of the Retirement Plan offered by Mr. William Werber of Washington, D. C., through the Minnesota Mutual Life Insurance Company and discussed at some length in our original report. This plan, we are convinced, contains a flexibility which will appeal to many doctors. The rates are reasonable and it is the most advantageous of a number of contracts studied. Designed, as it is, to supply an appropriate vehicle by which to take advantage of a Keogh-Jenkins type law if that should be enacted, we believe that even without such legislation, many members of the Association will find it attractive.

The Committee respectfully recommends that the House of Delegates approve these three programs and authorize their presentation to the membership of the Association.

A. C. Bozard, M. D.

J. D. Gilland, M. D.

Kenneth G. Lawrence, M. D., Chairman

#### **A. M. E. F.**

DR. HOWARD STOKES (Recognized): Members of the House (Reading Report of A. M. E. F. Committee for 1960)

"Your committee has held several meetings, several by telephone and one in Charleston at which time Dr. Kenneth Lynch, Chancellor of the Medical College was present. At this meeting the importance of the A. M. E. F. was discussed and the part it was playing in the life of our medical college. It was at this meeting that it was suggested that a permanent committee of the State Association be formed so that the committee personnel would not be completely changed from year to year. This amendment will be presented at the end of this report.

The committee is pleased to report that the total grant for the Medical College of S. C. for the year of 1960 is \$62,353.97, and a check for this amount will be presented to the College at this meeting. Of this amount only \$5,207.32 was a general grant from A. M. E. F. This check represents one twentieth of the total amount of contributions to A. M. E. F., a remarkable situation when one remembers there are 85 medical colleges sharing in the fund. These funds are to be used at the discretion of the Dean of the Medical College in an effort to further the aims of the college in medical education. It is only proper that this association be reminded that more than 80% of the funds contributed came from the faculty members of the teaching college itself. It is heartwarming that over 600 members of the Association contributed to this fund but there is no reason why South Carolina should not have 100% participation in this case. The committee plans to continue its policy of reminding our State Association members about the A. M. E. F. and to concentrate on 100% participation. Credit for the success of 1960 is due in great part to the work of last year's committee under the direction of Dr. Edwin Boyle and his group.

R. L. Crawford

Thomas R. Gaines

J. Howard Stokes, Chairman

Dr. Stokes (Continuing) With the permission of the President I will also read the amendment to the by-laws. Amend Chapter 8, Section 3 of the by-laws by adding at the end of the list of Standing Committees another to be designated as follows:

(11) Committee on American Medical Education Foundation. Amend the said Chapter further by adding another section immediately after Section 13, to be numbered Section 14, and by renumbering the sections of said Chapter to conform. Said Section 14 to read as follows:

"The Committee on American Medical Education Foundation shall consist of five (5) members, three (3) to be appointed by the President of the State Association, the president and treasurer of the Association, ex officio. The three (3) members to be appointed shall serve initially one (1) for one (1) year, one for two (2) years and one for three (3) years, as designated by the Chairman of Council. The terms of all members thereafter appointed shall be three (3) years. It shall be the duty of this Committee to supervise the conduct of all publicity and fund raising for A. M. E. F., to receive the reports from A. M. E. F. together with the remittance of such funds as may be allocated for the Medical College of South Carolina, to transmit the same to the Dean of the School of Medicine, Medical College and to receive from him reports and information concerning the application of the funds so received. The Committee shall act in all respects as the connecting link between the Association, the American Medical Education Foundation and the Medical College of South Carolina. Its chairman shall be elected annually by the Committee."



THE CHAIR: Thank you, Dr. Stokes. I will refer the report of that committee to Miscellaneous Business and the amendment to the by-laws to the committee on Constitution and By-Laws.

#### SPECIAL ORDER—

THE CHAIR: Gentlemen, it is now 4:30, time for a Special Order. The Annual Meeting of the Corporation, The South Carolina Medical Care Plan.

I will call your attention to the fact that in a few minutes we will rise and when we sit again we will be sitting as the Corporation of Blue Shield and not as the House of Delegates of the South Carolina Medical Association. You will have a new presiding officer, Dr. George Dean Johnson, President of the South Carolina Medical Care Plan will be in The Chair. Before we rise and change hats I would like to remind you that this is the time to gripe and raise hell and anything else you want to say about Blue Shield and not next month or next winter when we all calm down. So I invite your comments, as long as I am not presiding (laughter) and I hope you will give George Dean hell. I ask you all to rise. (Convention rises)

DR. JOHNSON: Thank you very much. (Applause)

### ANNUAL MEETING OF THE CORPORATION, THE SOUTH CAROLINA MEDICAL CARE PLAN

Presiding—Dr. George Dean Johnson.

THE CHAIR: Ladies and gentlemen, I declare the corporators of the South Carolina Medical Care Plan now in session.

There is no old business and I will give my report and ask for new business after that.

Report to the Corporators of the S. C. Medical Care Plan — April 25, 1961.

Your Blue Shield Plan is making more progress as time passes. Enrollment stands at the all time high of 71,310 contracts or 191,307 members. You will be interested to know, as was forecast last year, only about 1700 subscribers over 65 availed themselves of the old age medical care policy offered by your plan. Most of these signed up during the no restriction period when it was first opened to the public.

About 90% of practicing physicians in South Carolina will have signed up by the end of this calendar year. This is due not only to a better understanding of the plan but directly to the efforts of Bob Tomlin, the physicians' relations representative.

Financially your plan is in excellent condition—much better than Blue Cross. Your reserve has reached a satisfactory level and is invested in government bonds and in insured Building and Loan Associations. During the past year payments for certain procedures have been increased in order to meet the competition from some companies. Other benefits to subscribers as well as larger payments to physicians will be considered as time passes. So far anesthesiologists have not considered it wise to join with other physicians in this effort to forestall federal supervision and yet the President of the American Association of Blue Shield Plans is a practicing anesthesiologist in Washington. Roentgenologists are hesitant to enter into an agreement with your plan because they feel that reducing their fees by a percentage will simply reduce their income and in some instances not pay their cost. It is sincerely hoped that in the future these as well as other physicians will not feel suspicious of their colleagues who are trying to improve the only known method at our disposal to prevent federal control.

Let's glance for a few minutes at the national picture of Blue Shield. In June of last year, the House of Delegates of the A. M. A. approved a report of the Council on Medical Service which set forth specific proposals for closer relationship between the A. M. A.

and Blue Shield both locally and nationally. In December at the interim meeting, the House of Delegates passed a much stronger resolution to the effect "that the House of Delegates direct the Board of Trustees and the Council on Medical Service to assume immediately the leadership in consolidating the efforts of the A. M. A. with those of the National Association of Blue Shield Plans, the American Hospital Association, and the Blue Cross Association into maximum development of the voluntary non-profit prepayment concept to provide health care for the American People." A similar resolution concerning coordination with private insurance carriers was made at the same time.

The publicizing of doctors' attitude towards freedom of choice and freedom from federal supervision must be done by the physicians themselves. It might be wise to follow the example of the Oklahoma physicians. In every county there is a Member Council composed of a cross section of people from the community. Every month these councils meet—3000 people—and discuss the burning topics of medicine: cost, utilization, sickness. The three groups most concerned with medical care try to thrash out the proper answers. The groups involved are the people, the hospitals, and the medical profession.

In certain parts of our state television programs have been put on by physicians. More of this is needed if we are to portray the proper image of the physician as we see him.

Utilization is not only filling our hospitals but weakening the financial structure of Blue Cross. If a man has hospital insurance and is sick enough to be hospitalized certainly he should get all the benefits of hospital insurance to which he is entitled. By the same token, he should not be allowed to stay any unnecessary days because that is why we in South Carolina have the highest utilization in the southeast. In the larger hospitals admission review committees should be set up to cut down excessive utilization. The high cost of medical care will bring on federal control more quickly than anything else. It is to our personal gain that we see to it that utilization is kept within reasonable and proper limits.

Every month sees improvement in the central office in Columbia. Most of the delays in payment are due to a necessary time lag for the medical director's review. There is, and, I suppose always will be, a difference of opinion between the medical director, and the one who performs the procedure. The more clearly and accurately and comprehensively a procedure is described, the better will the medical director be able to decide the proper payment in keeping with previous similar procedures. Blue Shield is the physicians' plan and we are in much better position to improve it than we are any other. Let's all pull together to make it the best and most efficient in the business.

My term as a member of and President of Blue Shield ends with this meeting this afternoon. I have served on the Board since it was started and I have requested that I not be considered to succeed myself. I cannot praise Mr. Sandow enough especially and his colleagues who have brought our plan out of chaos to a smoothly operating efficient organization. Neither they nor we are content or smug or satisfied but we know great progress has been made and we all seek constant improvement. I wish to thank them as well as all the members of the board with whom I have had the privilege of serving, and I especially thank the laymen of the Board. To all the physicians in the state I am indebted. Our views have often clashed but never our aims and desires for the best possible medical care at a reasonable and proper payment to the physician. Blue Shield shall always be close to my heart and I shall seek every opportunity to advance



its interests as I have in the past. Thank you very much!

Mr. Sandow does not have a report, as such. If there are any questions or any comments that you would like to make at this time, if I can't answer them I am sure that Mr. Sandow or Dr. Guess or Dr. Charlie Lemmon can. Does anyone have any questions or comments? If there are none I would like to ask Dr. Guess to please come forward, Dr. Decherd Guess. Dr. Guess didn't know this was going to happen to him and he went out without realizing that he was going to be on the program. At the last meeting of the S. C. Medical Care Plan a committee was appointed, a committee of his home town neighbors who know him better than anybody else; they were asked to draw up appropriate resolutions on his retirement from Blue Shield and it is my great pleasure to read it to you now and present it to him.

*Whereas*, Dr. James Decherd Guess as Chairman of the South Carolina Medical Association Committee which studied and formulated the Blue Shield Plan in South Carolina, was a major instrument in its founding,

*Whereas*, he was elected the first president of the South Carolina Medical Care Plan upon its incorporation in 1949 and continued to serve as its president through the difficult years of its birth and growth, and

*Whereas*, when it was established he accepted and ably carried out the additional duties of Medical Director of its claim department.

*Now therefore be it resolved* that we, the members of the Board of Directors, hereby commend Dr. J. Decherd Guess for his constant and considerable service to this board in its planning, for his stimulating leadership and for his unflinching devotion to the welfare of the South Carolina Medical Care Plan and the citizens it serves,

*Be it further resolved* that the personal gratitude of each member of this board be tendered to Dr. Guess along with good wishes for his health and happiness.

S. C. Medical Care Plan

George Dean Johnson, President  
for the whole.

DR. J. DECHERD GUESS: President Johnson, members of the corporation. This is indeed a surprise to me and it is a surprise for a good many different reasons. One of the principal reasons is that I have been honored and recognized in so many different ways by our Blue Shield Plan before this. When I gave up the presidency, by request, the presidency of your Board, the Board presented me with a very very lovely memento, a lovely silver bowl which my wife and I prize; and then when some six months ago I presented my resignation as medical director of the plan to the executive officers of the plan, Mr. Sandow and his group, I was again recognized very very beautifully and sincerely at the annual Christmas party of the employees of the Blue Cross Plan. This comes as an additional surprise, perhaps this is like supercargo, too much, it is too much to do for any one man but I do appreciate it. But, what I was going to rise to say, before you called me up here—these nice things said on this piece of parchment will in no wise compensate me for the sorrow that came when Dr. Johnson announced that he was retiring from the Board and from the presidency as well. That was a shock to me. I am sincerely sorry and I am sure that you gentlemen on the Board will be when you have time to think it over, if not already, that he is retiring from the Board and as its executive head because from the very beginning he has been a most faithful and a most efficient member of the Plan, a man who has exercised remarkably sound judgment though starting off, as all of us did, with no knowl-

edge at all of Blue Shield insurance, but studied, made it a study, and has come up to be a very very fine executive and director. And I am very sorry. I suppose, I don't know, as this business progresses maybe somebody will get him to change his mind or refuse to accept his resignation or something else. I would like very much to see him continue as a member of our Board and if possible to have him as president—because, if we don't he will be entitled to things equally nice or nicer than I have gotten.

DR. JOHNSON: I am like Dr. Guess, I leave the Board in the thorough understanding that it is in very capable hands and I am sure that my place will be easily filled.

As you know, nominees for the Board are placed in nomination by the Chairman of Council, unfortunately you do not have a chance to decide whether they are the proper ones or not but if enough noise is made we can put up some more names. I will ask Chairman of Council, Dr. Gressette, to come forward and place in nomination the names of the candidates, Dr. Gressette.

DR. GRESSETTE: This is a piece of paper that George Dean gave me (laughter) he said, "you are to read it." (Reading) To succeed themselves: Dr. A. C. Bozard, Mr. Dill Ellis, Dr. Charles Lemmon, Mr. A. P. Nisbet and Mr. C. Vandiver. I move that these be nominated to succeed themselves.

THE CHAIR: All in favor of the candidates as suggested, please say "aye". (The vote was taken, it was unanimous and it was so ordered.)

DR. GRESSETTE: Now, there is one other place to be filled on that, and that is Dr. Johnson's place. I would like to say I can use Dr. Cain's older daughter's nickname to tell you we "Ditto" what Dr. Guess said and I reluctantly follow your instructions and I would like to prevail on you, for Council, to remain a little while, stay with us and reconsider. Dr. Luther Mace to succeed Dr. Johnson.

THE CHAIR: Gentlemen, I appreciate the kind remarks Dr. Guess and Dr. Gressette have made. This move on my part is not without a great deal of thought and deliberation and I am spread pretty thin already and I can't do justice to the things that I am already in and this is one of the things that I think is doing very well and certainly can get along splendidly without me, and I ask that you vote now on the nominee, Dr. Luther Mace to succeed me. (The vote was taken and unanimously passed.)

### (SPECIAL ORDER CONCLUDED) MEETING OF HOUSE OF DELEGATES (Cont.)

DR. CAIN (Presiding): The meeting of the House of Delegates is not adjourned. Dr. Johnson, I am delighted to know the progress Blue Shield has made since two weeks ago.

Gentlemen, we are now sitting down again as the House of Delegates of the South Carolina Medical Association.

The Committee on Medical and Hospital Insurance Contracts, whose report has been published in the Journal, has a supplemental report which is part of a brochure that was given you this morning, entitled "Supplemental Report of Insurance Committee." This mimeographed report, along with the report already published in the Journal, is referred to the Committee on Insurance, Blue Cross and Blue Shield.

DR. HARVEY ATWILL, JR. of Orangeburg (Recognized by the Chair): I would like to ask about this committee's report. At the last House of Delegates' meeting in May last year, we had a resolution presented and passed to the effect that we would make a study of the acquisition of a single report form, physicians' report form on insurance. Am I correct in con-

sidering that this was referred to this particular committee?

THE CHAIR: Yes, sir.

DR. ATWILL: Could you give me some information about what action was taken by the committee? Is the chairman present?

THE CHAIR: The Chairman is present. Have you got any report or any action on that particular phase of it, which was referred to your committee?

DR. LAWRENCE: No, we have no particular report on that particular matter.

THE CHAIR: No report on that particular matter, however I will rule that that is within the province of the reference committee on medical and hospital insurance contracts, if they wish to make a recommendation on that score.

Medical Advisory Committee to Selective Service, Dr. Frank Owens, Chairman. We will have your report now, Dr. Frank Owens.

### **Advisory Committee to Selective Service**

DR. FRANK OWENS:

Report of the Medical Advisory Committee to Selective Service To the S. C. Medical Association.

The Medical Advisory Committee to Selective Service was requested by National Headquarters to act in a standby basis.

The Doctor Draft Law is no longer in effect.

Many doctors are liable under the regular draft act. The Government has adopted a policy of not drafting doctors into service as foot soldiers, but of offering them commissions or of giving them the opportunity of applying for commissions.

Many doctors who would have been called up under the regular draft were deferred to accept intern or residency appointments. It was expected by the armed services that enough of these young doctors would apply for commissions so that no draft call would be necessary. This has not proved to be the case. Therefore the Armed Services have found it necessary to ask Selective Service to issue a call for 250 doctors. If enough doctors request commissions as the result of attention having been called to the need of the Armed Services, then the draft call may be cancelled. The need at present is in the Air Force.

Draft Boards have been ordered to have all young doctors examined not because all of these doctors are to be called but because they want to know how many doctors are physically able.

If the draft call is carried out then the youngest will be called first and presumably non-fathers before fathers.

The regular draft act provides ordinarily for liability up to 26 years of age, however if deferment has been made then the liability extends to 35 years of age.

The present draft call for 250 physicians for the Air Force is for delivery in July, 1961.

Doctors newly graduated are advised to seek a commission in their chosen branch of service.

Frank C. Owens, Chairman  
Medical Advisory Committee to  
Selective Service

### **Accident Prevention**

We will now have a Committee report on Accident Prevention, Dr. Henry Moore, Chairman. Dr. Moore. DR. HENRY MOORE, Columbia: Mr. Chairman, members of the Medical Association, I am the Chairman of the infant committee of this august medical association; I think we have all heard a great deal this afternoon about rules and committees and I heard one recently about a new Kennedy piece of legislation that was introduced in Washington I think we all would be a little interested in it, since it doesn't affect us but it affects some of our relatives. It seems that Mr. Kennedy is going to cover all fronts. He has

introduced a new piece of legislation allowing our Hebrew brothers to eat pork any day in the week, the Catholics to eat meat on Friday, and the Baptists to drink liquor in front of other Baptists. Now to get down to the more serious side of my report, inasmuch as our committee is an infant committee, nine months of age, we were a little late in getting material enough to make a report in time to get it into our medical journal. However, there was a factor that prevented this in that we had a call, a state-wide committee meeting on March 21-23, to consider one of our most important problems, and also I had a pregnant secretary, who had a boy baby about the same time as this and she didn't come back to work in time to get it in.

Report and Recommendations of the South Carolina Medical Association's Accident Prevention Committee.

I. This committee was first appointed September 2, 1960 on the recommendations of the State Pediatric Society and Dr. Hilla Sheriff of the State Board of Health.

The following members comprise this committee:

Margaret Jenkins, M. D., Charleston

William R. DeLoach, M. D., Greenville

L. W. Blackmon, M. D., Columbia

James B. Berry, Jr., M. D., Marion

O. B. Mayer, M. D., Columbia

Henry Moore, M. D., Columbia, Chairman

II: Two Committee meetings have been held, the original organizational meeting at Charleston, November 19, 1960.

It soon became apparent that a state-wide accident prevention program would entail considerable planning and organizational work to produce any worth while results. To date the committee has not had adequate time to carry out its plans which will of necessity include an educational program for our state Medical Association's local components and individual members. In actuality, very few physicians are adequately acquainted with or cognizant of the tremendous amount of accident prevention work that needs to be done or that needs medical guidance and counsel.

At present Dr. Margaret Jenkins is attempting to organize and plan a panel type of educational program which would include a group of physicians acquainted with accident prevention work. It is hoped that by these efforts, physicians on the local level can be induced to participate in local safety work. At the present time Dr. Jenkins has not completed her program and it is hoped that she will be permitted to go on with this work next year.

The committee further recommends that a speakers' bureau on accident prevention be set up by every organized county medical society. By such action, speakers could be made available to local lay and professional organizations or safety groups in the various communities. This is especially valuable for PTA, Boy Scouts, Highway safety groups, and other organizations that are interested in educating our lay people and children.

Educational pamphlets and safety publications designed to indoctrinate parents in proper accident prevention safe-guards should be urged for all doctors treating children. The committee, in cooperation with the State Board of Health's Accident Prevention program, is developing a safety pamphlet concerned with the prevention and treatment of dog bites. This will be prepared in pamphlet form for use in doctors' offices, health departments and hospital emergency departments.

III. Safety Legislation: Questionnaires concerning eye injuries were mailed out to all physicians doing ophthalmology in the state, and while only approximately 15 replies have been forthcoming to date, the



committee felt that there was sufficient data available to recommend certain action be taken by the legislative committee of the state Medical Association. Inasmuch as eye injuries from lead-type foreign bodies (BB's) are a frequent cause of total loss of vision and eyes in this state, this committee recommends that legislation be enacted to forbid the sale or manufacturing of lead missiles or shots for any type of gun. (I should have said toy gun or something like a pellet gun.) Since lead BB's are not magnetic and cause extensive destruction of the eye structures, it would appear reasonably simple to require that all types of BB's or pellets for sale in air-rifles, pellet guns, etc., be manufactured out of steel or other magnetic metal. Such magnetic foreign bodies can usually be removed from eyes without total loss of vision or eye.

The second legislative recommendation by this committee concerns automobile drivers licensing. This committee recommends that the state Medical Association actively promote or instigate through proper channels, legislation requiring vision acuity tests on all renewal applications for drivers license regardless of age. Vision examinations such as are required on original licensing would be adequate; and if done periodically as licenses are reissued, would certainly reveal many hundreds of unsafe drivers. When good vision is so essential to safe driving, certainly organized medicine should work for such a safety measure.

IV: The second state-wide committee meeting was held in Columbia, March 23, 1961. Only two committee members were present, plus Dr. Hilla Sheriff, State Board of Health, and Dr. Casper Wiggins, Chairman, South Carolina Accident Prevention Committee of the American Academy of Pediatrics. This meeting was called primarily to consider a proposed state-wide study of automobile-produced injuries by the Cornell University Crash Injury Research Unit.

This study proposes to carry out a three year investigation in this state with the program being carried out in the six highway patrol districts in consecutive six month periods. The following organizations are being requested to cooperate in this program: (1) S. C. Hospital Association. (2) S. C. State Board of Health. (3) S. C. Highway Patrol and (4) S. C. Medical Association.

The automotive crash injury research is a fact-finding program which is producing valid information concerning specific causes of injury to occupants of passenger automobiles involved in accidents. It is believed that many injuries, especially in moderate accidents, may be prevented when cars are designed to afford better occupant protection during accidents. In order to design increased protection in automobiles, automotive engineers need to know specifically which features of design and accident factors are most frequently associated with injury cause, such as windshield, instrument panel, steering wheel, roll overs, ejection, etc. Moreover, when design changes are made, it is necessary that their effectiveness in reducing injury be evaluated for further guidance of engineers. A representative of every major automobile manufacturer joined in the planning of this project and periodically receives progress reports and findings based on statistical data. As a result of previous studies since 1956, automobile manufacturers have engineered and tested in their laboratories new safety-designed features such as improved door locks, instrument panels to reduce their injury-producing potential, improved injury-absorbing steering wheels, and seat belts. Automobile manufacturers cannot make practical design changes unless statistical data based upon thousands of cases prove which type of accidents are most frequent and which design features are the causes of injury. Furthermore, as design improvements appear in new models, a large number of

cases are needed to evaluate the effectiveness of such changes.

Previously, 19 states have already participated in this study. The Department of the Army, National Institute of Health, and U. S. Public Health Service have furnished funds. In addition, Chrysler Corporation has provided support since 1955, and Ford Motor Company since 1958. The Armed Forces are vitally affected by the high percentage of passenger automobile casualties because their records reveal that a greater number of man-days are lost by military personnel injuries in passenger car accidents than by any other single cause, including combat.

This committee strongly recommends that the S. C. Medical Association approve and actively support this vitally needed study of the Cornell Crash Injury Research Program. Each and every practicing physician should lend full-hearted support and cooperation by filling out requested injury reports. Only accidents occurring outside incorporated cities and towns will be investigated in this program.

Henry W. Moore, Chairman  
S. C. Accident Prevention Com.

THE CHAIR: Thank you, Dr. Moore, this report will be referred to the Committee on Miscellaneous Business.

We will now have the report of the State Board of Medical Examiners, Dr. George Wilkinson. (After a pause) Dr. Wilkinson is not present, is there anyone present prepared to make his report? (It was stated from the floor he had just stepped out and someone was sent to call him.)

While we are waiting on Dr. Wilkinson, we will receive the report of the Executive Committee of the State Board of Health which has been published in the Journal. Dr. Wallace, is there any further report? (It was stated there was no supplemental report.)

Is there any old business to come before the meeting? DR. KENNETH LAWRENCE (Recognized by The Chair) May I introduce this supplemental report? I was new on the insurance committee and I would like to present it to the delegates, if I may. It was turned in initially, but I think it should be presented, do you want me to present it?

THE CHAIR: Dr. Lawrence, was that the one that was presented by mimeographed report?

DR. LAWRENCE: That is correct, but I just want to be sure that everyone was familiar with it.

THE CHAIR: Everyone has read it and I would like for you to take that up with the reference committee this afternoon.

Is there any old business to come before the house?

DR. WILLIAM WESTON, JR. (Recognized by The Chair) Do you wish to hear anything about Civil Defense and what recommendations we have to make? I have been acting Chairman for the last two years. I would like to make a report.

### Civil Defense

THE CHAIR: We will hear from the head of Civil Defense of South Carolina, Dr. Weston.

DR. WM. WESTON, JR.: Mr. President, delegates and guests. I made a brief report this morning in Council. Dr. Cain announced that I was head of the Civil Defense. That is a misnomer, Mr. Charles B. Culberson is the director, and a darn good one, of the Civil Defense and I hope you will continue to give your cooperation. I do not think that we are alive and alert to the situation and they have given me where the 16 units are in this state and I recommended, through Mr. Culberson's suggestion, that the County Health Officer be in charge of these and we are now placing it in the hands of a new committee, that is, the responsibility of the hospital units.

This is a resolution that our local society passed and through Dr. Bushouse's activity a great many other





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counties have passed it, and I think the state Medical Association should pass it.

*"Now Therefore Be It Resolved* that the Columbia Medical Society of Richland County does hereby accept the responsibility to organize, train and prepare for Emergency Medical Services in Richland County.

*Be It Further Resolved* that if a national emergency or natural disaster should occur an Emergency Medical Support Team, composed of such doctors, specialists, nurses, nurses aides, technicians and orderlies as the unit chief decides are required for the formation of an effective medical team, will assume their secondary or alternate role as members of a Medical Mobile Support Team and will, in the judgment of the State Civil Defense Director such action is necessary, transport the medical team to those areas where their services are urgently needed."

THE CHAIR: Thank you, Dr. Weston. I will refer Dr. Weston's report to the committee on Public and Industrial Health.

Gentlemen, I have one announcement to make. The South Carolina Civil Defense has an exhibit of a mobile operating room, this is a sample of the whole hospital. This room is set up in the public library of Charleston County which is right across the street and it is open today from 5:00 until 7:00 and tomorrow from 1:00 until 3:00 and we certainly hope that you will take this opportunity to go by and see just what part of these field emergency hospitals look like when they are set up.

Now, these committees will meet when this assembly adjourns and will continue in session until their business has been completed and they will report to the House of Delegates tomorrow morning. If any of you needs secretarial help in preparing your report get in touch with Mrs. Motte in the booth and they will have girls down there to help you write your reports. Is there any further business?

If not, I declare this assembly recessed until tomorrow morning.

### (HOUSE OF DELEGATES RECESSED)

#### Minutes to be continued in October number

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#### PHILIPS ROXANE

Despite the present pressures on pharmaceutical firms, a new and large company has just announced its debut in the manufacturing field. Philips Roxane has an extensive background here and abroad and operations and affiliations with a number of important firms. Its headquarters will be located in St. Joseph, Missouri, and among its projects is the development of a measles vaccine now in extensive clinical trial. Other endeavors will be in the line of

steroid chemistry, and many other lines.

The Columbus Pharmacal Company of Columbus, Ohio, will be the nucleus for marketing in the new organization and will assume the new name. Veterinary products will also be produced by an affiliate, the Anchor Serum Company.

The Company has just produced an interesting non-commercial exhibit at the recent meeting of the AMA.

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#### DR. W. R. DUKE

(Continued from page 400)

University in Atlanta, where he was highest honor graduate. He was an officer in the U. S. Navy for 11 years, leaving the Navy with the rank of commander

to do graduate work in surgery at the Mayo Clinic.

Dr. Duke was a fellow of the American College of Surgeons and a member of the American Medical Association, the Southern Medical Association and state and local associations.

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# The Journal of the South Carolina Medical Association

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## BLEEDING IN THE LAST TRIMESTER

A. STARK WOLKOFF, M. D.

*Assistant Professor of Obstetrics and Gynecology  
University of North Carolina, Chapel Hill, N. C.*

**B**leeding in the late months of pregnancy is always pathologic and except in one unique instance, demands investigative procedures. Since vaginal bleeding can be caused by such simple lesions as cervical erosions and granulation on the eroded tissue, to a complete placenta previa it is obvious that it is unwise to study this phenomenon with symptoms or specific entities in mind. It is axiomatic that a pelvic examination in a case of chronic cervicitis has much less significance than one for placenta previa, and yet most of us know the insignificant symptoms which may serve as a prelude to the hemorrhage of the latter. How then does one approach this problem of the last trimester bleeder?

Much information and subsequent diagnosis is available on the first significant communication of physician and patient. It is certain that a patient at term with sudden heavy bleeding needs immediate hospitalization, cross-matched available blood and observation to report vital signs, to estimate blood loss, and finally, to evaluate the fetal status. The real difficulty is the minimal bleeder or spotter not yet at term with this persistent sign of staining for a day or two. At this point a plan of action is in order and a general philosophy of management is indicated.

Since the etiology of the two major potentially catastrophic entities of placenta previa and abruptio placentae are unknown there is nothing to be gained by attempting to diagnosis on theoretic grounds. Of course,

toxemia of pregnancy is frequently (15 to 40% incidence reported) associated with abruptio placentae and multiparity with placenta previa. Abnormal presentations have also been incriminated (15%) in placenta previa, but the important point to remember is that statistics are useless in diagnosing a particular case, although, if one plays percentages, his guesses will be more frequently correct.

Therefore, all bleeders should be admitted to the hospital. The obvious ones close to term with significant hemorrhage should be worked up immediately and when an evaluation of the patient's general condition can be made from careful examination of the vital signs, and the necessary laboratory work, a definitive diagnostic procedure should be done in the operating theatre with all means at hand to proceed to abdominal section should the situation require such a step. The case of the bleeders, prior to the 36th week of pregnancy, must be handled in a markedly different fashion. Macafec and Johnson, on different continents, published similar papers suggesting a method of management of bleeders in pregnancy who have not yet reached 36 weeks of gestation. This management has been labeled "the expectant management" and various clinics have reported a reduction of 25% in perinatal mortality for babies born associated with placenta previa.

The reasoning behind this management is simple:

1. It has been shown that babies born any



time after 36 weeks, weighing 2500 grams or more have as good survival figures as term babies.

2. Women with last trimester bleeding rarely, if ever, bleed to death with the first episode of bleeding unless subjected to a rectal or vaginal examination.
3. Blood replacement for the mother with a complication of placenta previa, and a premature infant, is feasible over a protracted period of time, and is instrumental in maintaining intra-uterine growth and development.

Once a decision has been made to manage a patient "expectantly" certain ancillary steps should be taken. A complete and frank discussion is indicated so that the patient understands the reasons for delay. Also an assessment of the patient's intelligence, should home care be necessary, must be made. Proximity to the hospital, an informed husband and an enlightened house staff are important facets to this complicated problem. Certainly a complete hospital workup is indicated at the time of the first bleeding episode. Such entities as blood dyscrasias, isoimmunization, blood type, and the level of hemoglobin and hematocrit must be screened and evaluated. A very gentle abdominal examination of the pregnant uterus should be done and the fetal heart rate carefully noted as well as the location of the placental bruit. At this time an evaluation of the size of the fetus should be made and correlated with the times of the last menstrual period and expected date of confinement. It is most important that accurate prenatal records be kept. The first time fetal heart tones are heard should be underscored on the record. This one sign can greatly ease the difficulty in evaluating the length of gestation since a twenty week period after the heart sounds are first audible guarantees a sufficiently mature infant.

If the initial bleeding has stopped or is just minimally present, a careful examination with the speculum is in order to rule out local factors which could cause bleeding. At this time, however, digital exploration of the fornices in order to evaluate the softening associated with placental implantation should not be done.

The patient should then have a placento-

gram performed. With modern techniques this exposure amounts to considerably less than 0.5 roentgens. No other examination, radioactive tracers included, can match the information obtainable on a good placentogram. Even posterior implantations can be detected if the technique is carefully followed, and the bowel free of air and contents.

The use of bladder contrast studies in my experience has not been significantly advantageous and displacements of the head frequently can be detected on the placentogram.

The important feature of a good placentogram is the finding of a fundal implantation. Although these cases are still obtuse because of their bleeding history, after this sign subsides, it is very comforting to know that as they leave the hospital still undelivered, they do not in fact have placenta previa. Since this is the worst offender, much confidence is gained as to the eventual outcome.

Other than weekly visits, blood replacement, serial blood level determinations and reassurance to the patient, nothing more should be done in cases of probable placenta previa until 36 to 37 weeks depending perhaps on the size of the fetus as determined abdominally. At this time with confidence in the maturity and prognosis of the fetus should it be removed from the uterus, a definitive examination is done in a room arranged for immediate laparotomy. Cross matched blood should be available and a large bore needle should be inserted in an arm vein with isotonic fluid running. A sterile vaginal examination is performed. First palpation of the fornices is done followed by digital exploration of the cervical canal and lower uterine segment.

Should placenta previa be diagnosed by palpation of the characteristic feel of trophoblastic tissue or heavy bleeding ensue, nothing is served by further conservatism and immediate low segment cesarean section should be performed. On the other hand if no tissue is felt, and no bleeding results, the patient can be observed for an additional hour or so and discharged to her home with instruction to return in one week, immediately if bleeding recurs, or with the onset of labor. At surgery in the case of placenta previa I have maintained the Munro-Kerr transverse incision in

the lower segment, and even in cases of anterior wall implantation of the placenta, my only modification is to reach into the uterus before delivery of the infant and extract and clamp the cord, thus preventing hemorrhage from occurring on the fetal side of the placenta. Several reports by Kistner and others having indicated that placenta accreta is more frequently associated with abnormal implantations, and in addition under direct vision through the incision in the lower segment better hemostasis can be achieved than can be expected through the classical incision. It is superfluous to mention the use of bag or pack.

Abruptio placentae is the other potentially catastrophic entity associated with third trimester bleeding. In this situation very little is served by the so called conservative approach, and in fact much harm can result. The incidence of abruptio is 0.5% and has been aptly called accidental bleeding of the last trimester as contrasted to placenta previa which is inevitable bleeding.

Arbitrarily this entity has been classified in this way:

1. Mild abruptio with external bleeding of less than 400 ml. with little pain, or hyperirritability of the uterus, and a normal fetal heart.
2. Moderate severe abruptio — external bleeding of more than 400 ml. with considerable more pain than is usually present, tense, irritable uterus and slow or irregular fetal heart.
3. Severe abruptio — hemorrhage or not associated with a tense painful uterus, absence of fetal heart sounds, and possibly associated with shock, or clotting element depression.

It is important to realize that there is only one entity present, premature separation of a normally implanted placenta. In my experience with placental anatomy and physiology, I have been unable to demonstrate the Spanner theory on the circulation of the placenta and must include the so-called "marginal sinus tear or bleeding" as a mild type of abruptio placentae.

The method of management is basically the single act of emptying the uterus although the method of delivery, vaginal or abdominal, de-

pends on several variables. The immediate examination of the patient should be followed by a sterile vaginal examination with amniotomy. The rupturing of the membranes decreases the intra-ovular pressure which is said to decrease the possibility of extravasation of maternal blood into the surrounding tissue with subsequent failure of the clotting mechanisms. Also, of course, the placenta is splinted to a certain extent by this decrease in pressure. The labor is augmented, and this is desirable should the vaginal route be selected. Lastly, occult bleeding into the amniotic or chorionic sac can be immediately detected.

It is my conviction that many cases of abruptio placentae and placenta previa in mild forms can not be differentiated. Fortunately most abruptio cases occur after 36 weeks and can be immediately subjected to a double set-up procedure. Little is lost in the equivocal early abruptio by conservative management until one's hand is forced by hemorrhage or overt signs of uterine hyperirritability or fetal heart irregularity. Certain it is that the perinatal mortality, to say nothing of maternal mortality, can be reduced only by more rapid delivery which implies the abdominal route if much cervix is still present. In the mild cases of abruptio an attempt at vaginal delivery is in order and rupture of the membranes and oxytocin stimulation is permissible if the x-ray measurements of the pelvis are adequate.

All cases of abruptio with slow or irregular fetal hearts should be delivered promptly.

Finally a word about two complications which are not uncommonly seen with abruptio placentae.

#### (1) Renal shut down

Renal shut-down is frequently seen in neglected cases of abruptio in which the patient was at some time in a shock state. Almost invariably these patients, because of prodromal symptoms, have become dehydrated in the preceding couple of days. If after delivery a careful observation is made on urine output before allowing dehydration or a hyperpotassemia from transfusions to occur, some reasonable success can be expected if the patient is not harmed iatrogenically.

#### (2) Hypofibrinogenemia

In our institution at Chapel Hill it has been

our policy in cases of abruptio placentae to evaluate carefully the mother's peripheral blood for clotting defects. The numerous factors besides fibrinogen, found in the prothrombin component such as A.II.F., Hageman, Christmass, Factor V & VII, etc., can all be distorted in this type of bleeding. Although no specific remedies other than fresh blood or fibrinogen are available at this time, it is of some importance when fibrinogen can be given. Since fibrinogen is obtained from pooled plasma its use is complicated by homologous serum hepatitis in 8% of the cases. The use of fibrinogen prior to delivery of the fetus and placenta, theoretically at least, enhances intravascular thrombosis and emboli.

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*Population studies of atherosclerosis.* Dale Groom, M. D. (Charleston) Ann. Int. Med. 55:51-62, July 1961.

Studies of human populations have contributed impetus and unique insight to our understanding of atherosclerosis. They serve as nothing else can to delineate the natural history of the disease, often on a scale unprecedented in clinical medicine. Most important, they deal with the end results in the human.

On the other hand, certain limitations inherent in this approach account for many of the conflicting interpretations and conclusions. Population studies are fraught with an appalling number of variables, with barriers of language, medical customs, and understanding which become greater as greater becomes the contrast in civilizations. They are of necessity uncontrolled and lack the precision of the planned animal experiment.

Vital statistics of the medically underprivileged country are not an accurate measure of the prevalence of atherosclerosis and cannot be weighed against those of a highly civilized people. Largely on the basis of such statistics, the concept has grown that the high fat diets associated with an economy of abundance causes high levels of lipids in the blood which, in turn, cause occlusive disease in the intima of arteries. Though evidence is overwhelming that fat metabolism is intimately related to atherogenesis, a second look at the population data shows strikingly similar correlations with environmental factors other than diet (stress, educational standards, competitiveness and drive, use of tobacco or telephones, trace elements in drinking water, occupation, and physical exercise) as well as with race, gender, family history, and perhaps aberrations of blood clotting.

Generally the more objective studies of pathologic material show lesser differences in incidence and

It is probably better policy to deliver the patient by the most expeditious means, cesarean section included, and then after removal of the placenta invoke fibrinogen therapy. An intermediate road followed by some is to use whole fresh blood in the transfusion.

The danger associated with abruptio is too close adherence to the theorem of "delivery from below if at all possible". Probably all abruptio cases can be delivered from below but at such cost! Maternal and perinatal mortality is frequently associated with renal shut down, Couvclaire uterus and failure of the clotting mechanisms. A scar on the uterus is just not that bad in contrast.

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severity of atheromatous disease. Moreover they disclose significant patterns of localization of lesions among populations (and individuals), the reasons for which are unknown. We grow old at different rates in the different vascular beds of the body.

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*Re-operation for mitral stenosis* by D. E. Harken, H. Black, W. J. Taylor, W. B. Thrower and L. B. Ellis (Charleston) Circulation 23:7-12, Jan. 1961.

A series of 80 re-operations for mitral stenosis in 79 patients is reported and analyzed.

The most important causes of deterioration after valvuloplasty for mitral stenosis are inadequate initial operation, re-stenosis, and mitral insufficiency. Generally more than one of these factors pertain.

An adequate mitral valvuloplasty requires the complete opening of both the anterior and posteromedial commissures and the mobilization of the chordae tendineae from each other and from the wall of the ventricle.

The advantages and limitations of closed re-operation, open re-operation, the right-sided approach, and the use of the transventricular valvulotome are reviewed.

More complete correction of stenosis with mobilization of posteromedial, anterior, and subvalvular chordae is emphasized. This is attained by operating from both the ventral and dorsal aspects of the patient through a left posterolateral thoracotomy incision.

An Ivalon operating tunnel sutured to the left atrial wall at re-operation makes it possible to carry out the more extensive valvuloplasty at re-operations.

A lower operative mortality, better longterm results, and fewer instances of deterioration are anticipated when this concept of improved valvuloplasty is effected initially.



# MANAGEMENT OF ACUTE RENAL INSUFFICIENCY

WILLIAM B. BLYTHE, M. D.

*Dept. of Medicine, U.N.C. School of Medicine,  
Chapel Hill, N. C.*

**A**cute renal insufficiency, in the most literal sense, connotes cessation of urine flow secondary to disturbance in the normal physiology of the kidney and is thereby distinguished from anuria secondary to blockage of the ureters or lower urinary tract. Its causes are numerous and include acute tubular necrosis, renal medullary necrosis, bilateral renal cortical necrosis, and acute glomerulonephritis.

By far the most common cause of acute renal failure is acute tubular necrosis. I shall use acute tubular necrosis as a prototype in discussing acute renal failure, since the derangements produced by anuria of various causes are more or less the same. Although there had been previous references to the disease, it was not until the early years of the second World War that understanding of acute tubular necrosis began to advance rapidly. In 1941, Bywaters and Beall<sup>1</sup> described "crush injuries with impairment of renal function", which came to be called Lower Nephron Nephrosis by Lucké<sup>2</sup>, because it was thought that the lesions causing anuria were in the distal tubule or "lower nephron".

A major advance in understanding the pathology of the disease was made in 1951 by Dr. Jean Oliver,<sup>3</sup> who dissected out entire nephrons from kidneys of patients with acute tubular necrosis. He pointed out that the lesions are not confined to the distal tubule, but, in fact, are scattered throughout the nephron. He found that there are two types of lesion: one, which he called the nephrotoxic lesion, is confined to the proximal tubule while the other, called tubulorrhexis, occurs in any part of the nephron. It is Dr. Oliver's contention that the latter-mentioned lesion is a consequence of ischemia, whereas the other lesion results from toxins.

Thus, in acute renal insufficiency of non-toxic origin, the insult is circulatory, a part of an episode in the general circulatory disturb-

The author discusses the causes of this condition, e. g., acute tubular necrosis, and the basic pathologic changes, differential diagnosis, complications, and management—Cation exchange resins, peritoneal dialysis, and hemodialysis are considered.

ance which has involved the peculiarly susceptible area of renal blood flow. Such a renal circulatory episode may occur also as a consequence of the circulatory disturbance of intoxication. These findings make it easier to understand why acute tubular necrosis may be produced by a variety of poisons and drugs, heavy metals, products of hemolysis and the crushing of tissues, or an episode of shock.

## *Differential Diagnosis*

Prompt recognition of acute renal insufficiency is essential if proper management in the early days of the disease is to be afforded. The physician is frequently faced with the clinical problem of a patient who has been oliguric for a matter of hours arising from a situation that may have produced acute tubular necrosis, but, which, on the other hand, may be due solely to dehydration and hypovolemia. It should be emphasized that proper correction of dehydration should always be undertaken, but the practice of injudiciously administering "fluids" in an effort to "flush the kidneys" or in some hopeful but unrealistic manner to produce urine is hazardous and to be deplored.

In general the differential diagnosis of anuria is not easy, but if one approaches each case in some systematic fashion and with reasonable assurance about the disorders that must be excluded, the diagnosis can be established without doubt in the great majority of cases.

The diagnosis of acute tubular necrosis should not be accepted until (1) dehydration has been corrected and (2) there is no doubt

about lower urinary tract and ureteral obstruction.<sup>4</sup>

Lower urinary tract obstruction is excluded simply by the insertion of a catheter into the urinary bladder. Exclusion of ureteral obstruction is more complicated, obviously, but nevertheless, if the history does not point to an obvious diagnosis of acute tubular necrosis, it is our feeling that ureteral catheterization on one side, at least, should be undertaken. Furthermore, this procedure should always be preceded by a flat film of the abdomen in order to ascertain that both kidneys are present.

In addition, there are certain urinary findings which are characteristic of acute tubular necrosis. The urinary specific gravity is usually about 1.010 in tubular necrosis, whereas in dehydration or acute tubular necrosis it will be much higher. Further, although they are not conclusive, there are data which imply that the urinary Na concentration is high (80-110 mEq./L) in acute tubular necrosis, whereas in dehydration it will be extremely low.<sup>5</sup> Lastly, it is not uncommon for one to observe sheets of epithelial cells in the urine shortly after the onset of tubular necrosis.

#### *The Pathophysiologic Consequences of Anuria*

Once the diagnosis of acute tubular necrosis is made, it is imperative that one understand thoroughly the principles underlying management. As Merrill has written,<sup>6</sup> "It cannot be said that this is a disease from which the patient usually recovers in spite of the physician. Rather it is a disease of which patients frequently die because of mismanagement."

It therefore seems worthwhile to discuss briefly the pathophysiologic consequences of anuria.

Most of the chemical derangements result from a lack of excretion of the end products of protein metabolism. The blood urea nitrogen concentration progressively increases as anuria proceeds; however, so far as is known, increase in urea concentration to the extent seen in acute renal failure, produces few, if any, deleterious effects but serves rather as a parameter of protein catabolism and retention of other substances which are toxic. As the blood urea nitrogen concentration rises, nausea and vomiting become prominent,

bleeding disturbances appear, and anemia which results from both bone marrow depression and increased destruction of erythrocytes becomes established. Although the data are not clear-cut, there is abundant evidence that decreased resistance to infection and delayed wound healing are consequences of anuria. In fact, one of the leading causes of death in acute renal insufficiency nowadays is infection.

The most serious and life-threatening abnormality that results from inability to excrete protein breakdown products is the development of hyperkalemia; however, this complication is not as common as formerly, as will be discussed later.

Still another consequence of retention of end products of protein metabolism is the increase in the concentrations of phosphate, sulfate, and other non-volatile anions. The increase in concentration of these acids has at least two secondary consequences. *First*, since they are buffered by the bicarbonate-carbonic acid pair of buffers, they are more highly dissociated acids than carbonic acid. As a consequence there is a reduction in the concentration of bicarbonate, an increase in the concentration of carbonic acid and  $p\text{CO}_2$ , and a decrease in the pH. The two latter alterations stimulate increased respiratory effort. The excretion of  $\text{CO}_2$  by the lungs is accelerated, and the metabolic acidosis may become reasonably well compensated. *Second*, the increased concentration of phosphorus is associated with the development of hypocalcemia which rarely may cause frank tetany.

In addition to lack of excretion of protein breakdown products, there is no excretion of water and there are several areas in which water retention can lead to dire situations.

First and foremost is congestive heart failure, particularly acute pulmonary edema. This is not as common a complication as formerly because, as we have learned more about acute tubular necrosis, we have learned that the water requirements of these patients are not as high as was formerly thought to be the case.

Secondly, water retention leads to hyponatremia and hypotonicity of the extracellular fluid so that water tends to enter cells and the consequences of water intoxication; convul-

sions, weakness, apathy, and mental obtundity become manifest.

As stated earlier, it is essential that management of anuria be based on sound physiological principles because the patient's survival is largely dependent upon proper management. Careful attention to details in the care of the seriously ill patient should not be overshadowed by attention to electrolytes, etc.

In establishing the water needs of the patient, the best guides are the daily weight of the patient and careful observation of the amount and character of output from all routes. The physician must not allow the patient's appreciation of thirst and hunger to dictate the therapy, but, instead, he must control in entirety the patient's intake.

A non-febrile 70 kg. patient resting in a temperate environment and not sweating has an insensible loss of water from skin and lungs amounting roughly to 1000 ml. per day. Preformed water and water of oxidation of fat and protein should amount to about 400-500 ml./day, thus leaving a water deficit of 500-600 ml./day.

Endogenous protein catabolism in such a resting patient receiving no exogenous nutrient amounts to approximately 1 gm. per kilogram of body weight—or about 70 gm./day in a 70 kg. man.<sup>7</sup> This protein catabolism will be increased by fever, infection, physical activity, and the so-called metabolic response to injury in postoperative or post-traumatic cases. Measures which minimize these factors will retard the development of potassium intoxication and acidosis.

Since the remainder of the caloric requirement must be met by burning body fat, there will be a tendency towards ketosis which will increase the acidosis related to the retention of the inorganic anions sulphate, phosphate, etc.

This may be combatted by the administration of 100 gm. of carbohydrate per day. Not only will this prevent ketosis, but will reduce protein catabolism by elimination of protein contribution to the Krebs cycle. Thus the rate of accumulation of sulphate, phosphate, potassium, and urea will be decreased.

To recapitulate, the patient without complicating features should receive about 500 ml. water and 100 gm. carbohydrate per day. It

is our practice to administer this by way of a plastic catheter inserted in a peripheral vein and extended into the vena cava. A 20% dextrose solution administered throughout the 24 hours is a satisfactory fluid prescription. Further, we usually do not allow the patient to take anything by mouth because of the high incidence of vomiting, and we have observed both aspiration and cardiac arrhythmias complicating vomiting.

It is the rare case that can be managed by proper fluid and caloric intake alone, and there are other measures that almost always must be employed.

In the first place, most patients with acute tubular necrosis exhibit marked protein catabolism in the first few days of anuria. This is most severe, of course, in post-traumatic and post-surgical cases. Hyperkalemia in these instances is rarely controlled without application of other measures. And, furthermore, when anuria lasts more than 10 to 14 days, and, in some cases even before this, patients become less alert, more prone to convulsions, and even progress to coma. Although the cause for this mental deterioration is unknown, it is thought to be secondary to retention of some as yet unidentified toxic substances.

It is because of these phenomena that other measures are necessarily employed, notably cation exchange resins, "anabolic" agents, and dialysis, both peritoneal dialysis and hemodialysis.

#### *Cation Exchange Resins*

These agents have come to be used more and more in controlling hyperkalemia and consonant with their wider use, better resins have been developed. An ion-exchange resin is a cross-linked polymer containing acidic or basic structural ions that can exchange either cations or anions respectively on contact with a solution.

In general, resins that are useful in combatting hyperkalemia are in the sodium, hydrogen, or ammonium cycle. In most circumstances resins in the sodium cycle are preferable to those in the hydrogen or ammonium cycle since the latter two will produce metabolic acidosis and tend to offset the beneficial effects of removing potassium, since acidosis *per se* may produce hyperkalemia.



The resins may be administered orally or rectally. We have found administration by the rectal route to be more satisfactory since patients with acute renal insufficiency tend towards nausea and vomiting and the resins are quite unpalatable. Furthermore, the fluids of the lower gastro-intestinal tract are rich in potassium.

Recently a new sodium-exchange resin has been developed which is more palatable and which moves more easily through the gastro-intestinal tract. This resin is a sulfonic polystyrene cation-exchange resin in the sodium cycle.

It is difficult to be sure of the correct amount of resin to use in any case. It has been our practice to administer 20 gm. by rectum every 1 or 2 hours until the serum potassium concentration is within normal limits and then to continue resins at regular intervals, the frequency of which is dictated by effectiveness in maintaining the serum potassium at normal levels.

Another maneuver which we have found effective in reducing serum potassium concentration as well as ridding the patient of excess water has been the administration of Sorbitol, which is a non-absorbable polyalcohol of the hexose sugar sorbose. Sorbitol, since it is not absorbed from the gastro-intestinal tract, is an osmotic cathartic and removes water as well as potassium and other electrolytes.

*Peritoneal dialysis*—Although this procedure was first used in human subjects in 1923, it had never been widely employed in treating patients with acute tubular necrosis, probably because of complications accompanying its use. However, in the past few years the technique has been improved so that the incidence of complications is low.

It has been our experience that peritoneal dialysis is quite beneficial in correcting the chemical abnormalities of anuria, but that it accomplishes little in correcting the mental obtundity and other symptoms which accompany anuria, but which cannot be relieved by correcting the chemical abnormalities.

For these reasons, it has been our practice to employ peritoneal dialysis in those situations in which the patient is reasonably alert but in whom hyperkalemia and acidosis cannot be

controlled by the measures which I have previously mentioned.

*Hemodialysis*—During the past 10-12 years there has accumulated a large body of evidence that has resulted in agreement that hemodialysis is a necessary concomitant to the conservative management of acute renal insufficiency. There is little doubt that hemodialysis has been life-saving in certain instances where other measures failed, and there is now abundant evidence that hemodialysis decreases the morbidity and incidence of complications in acute renal insufficiency.

As experience with the artificial kidney has broadened, there have been changing concepts as to the indications for its use. The tendency in most centers seems to be use of hemodialysis earlier in the course of acute renal insufficiency. However, the indications still range from those which are clear-cut and agreed upon to those which are vague and in dispute.

The most notable and unchanging indication for hemodialysis is uncontrollable hyperkalemia. Hemodialysis is unsurpassed in the rapidity and certainty with which the extracellular concentration of potassium may be decreased. However, coincident with the aggressive use of cation exchange resins and peritoneal dialysis, the incidence of hyperkalemia has been markedly reduced so that this is not a common indication for hemodialysis.

Other chemical derangements such as extreme elevations in blood urea nitrogen and marked acidosis in themselves are often considered in some centers as indications for dialyses, and, because extracellular fluid is effectively removed by machines employing ultrafiltration, marked overhydration, when resulting in symptoms of water intoxication or cardiac failure, might be considered at times as an indication for hemodialysis.

It has become increasingly apparent to those treating acute renal insufficiency that lowering the serum potassium to normal, as well as correcting acidosis and other electrolyte derangements, does not uniformly prevent clinical deterioration as manifested by mental obtundity, twitching, convulsions, and coma. Furthermore, there is not always good correlation between the appearance of these symptoms and

the concentration of blood urea nitrogen.

For these reasons, clinical deterioration of the patient rather than chemical abnormalities *per se* has become a major indication for hemodialysis. At present the ease of decision to dialyze is directly dependent upon the rigidity of criteria used to make the decision.

Recently there have been reports<sup>8,9</sup> advocating repeated prophylactic dialyses as a means of preventing clinical deterioration, and, in fact, practically all of the consequences of anuria. In one of these reports<sup>9</sup> there was noted an impressive decrease in mortality rate as well as complications.

It should be emphasized, however, that this means of treating acute renal insufficiency has not been employed widely. Since it is quite expensive and requires large numbers of skilled personnel, its efficacy should be established before it is undertaken on a widespread scale.

#### *Management During the Diuretic Phase*

The diuretic phase of acute renal insufficiency is characterized by output of large volumes of urine which is hypotonic. The kidneys, during this stage, are also not able to conserve solute. Therefore, the outstanding dangers during this phase are extreme dehy-

dration and subsequent vascular collapse hypokalemia, hyponatremia, and acidosis.

It is necessary during this period to know accurately the patient's state of hydration, the urinary output, as well as the urinary concentration of sodium and potassium, and the serum sodium, potassium, and bicarbonate concentration. When these parameters are known, one can replace accurately the losses of water and solute.

In closing, I should like to comment on another—and perhaps the most important—aspect of the management of acute renal insufficiency. In the preceding remarks I have tried to emphasize that the great majority of patients will require specialized forms of therapy that by economic necessity are available only in hospitals wherein a larger number of patients with acute renal failure are seen. Further, it is highly improbable that one can predict at the onset of the disease which patients will need these therapeutic adjuncts or when diuresis will ensue in any given patient. For these reasons, it is our philosophy that once the diagnosis is made or suspected the patient should be sent to a hospital where all the necessary chemical measurements can be made and all the highly specialized forms of therapy are available.

#### REFERENCES

1. Bywaters, E. G. L. and Beall, D.: Crush injuries with impairment of renal function. *Brit. M. J.* 1:427, 1941.
2. Lucké, B.: Lower nephron nephrosis (the renal lesions of the crush syndrome, of burns, transfusions and other conditions affecting the lower segments of the nephrons.) *Mil. Surgeon* 99:371, 1946.
3. Oliver, J., MacDowell, M., and Tracy, A.: The pathogenesis of acute renal failure associated with traumatic and toxic injury. Renal ischemia, nephrotoxic damage, and the ischemic episode. *J. Clin. Invest.* 30:1307, 1951.
4. Welt, L. G.: *Clinical Disorders of Hydration and Acid-Base Equilibrium*. 2nd ed. Boston, Little, Brown and Co., 1959.
5. Meroney, W. H. and Rubini, M. E.: Kidney function during acute tubular necrosis: clinical studies and a theory. *Metabolism* 8:1, 1959.
6. Swan, R. C. and Merrill, J. P.: The clinical course of acute renal failure. *Medicine* 32:215, 1953.
7. Strauss, M. B. and Raisz, L. G.: Treatment of acute renal shutdown. *A.M.A. Arch. Int. Med.* 95:846, 1955.
8. Scribner, B. H., Buri, R. and Caver, J. E. Z.: Continuous hemodialysis as a method of preventing uremia in acute renal failure. *J. Clin. Invest.* 39:1027, 1960.
9. Teschan, P. E., Baxter, C. R., O'Brien, T. F., Freyhof, J. N., and Hall, W. H.: Prophylactic hemodialysis in the treatment of acute renal failure. *Ann. Int. Med.* 53:992, 1960.

# A NEW ANTI-INFLAMMATORY ANAESTHETIC TOPICAL PREPARATION\*

A. M. ROBINSON, M. D.

Columbia, South Carolina

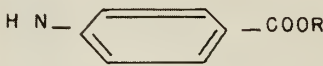
Topical anaesthetics have long been used to relieve itching; however, their chief drawback has been contact sensitivities particularly from the esters of para amino benzoic acid (A) often referred to as the "caines". Procaine and benzocaine are examples of these frequent sensitizing agents.

Lidocaine (xylocaine) is a totally different molecule. It is not a "reactive" ester but a stable amide of xylene (B)

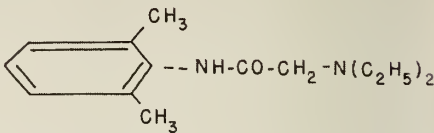
Thus lidocaine has been erroneously named and should not be classed with the sensitizing "caine" drugs.<sup>1</sup>

Freeman<sup>2</sup> used lidocaine in the Acid Mantle

\*Lida-Mantle HC, Dome Chemicals, Inc., New York, N. Y.



"Caine" esters  
A



Lidocaine  
B

base<sup>oo</sup> and found it beneficial in 50 cases of pruritic dermatoses. No cases of sensitivity were found. This preparation was further in-

TABLE 1

Condition	Number of Cases	Results			
		++++	+++	++	0
Nummular Eczema	6	2	4		
Hypostatic Eczema	1		1		
Contact Dermatitis	2	1	1		
External Irritative Dermatitis	2	1		1	
Intertrigo	2			2	
Atopic Dermatitis	2	1		1	
Neurodermatitis	3	1	1		1
Xeroderma	2		2		
Lichen Planus	1		1		
Lichen Chronicus	1			1	
Psoriasis	2		2		
Pruritus	6	1	5		
Scalp	2	1	1		
Ani	2		2		
Vulvae	2		2		
Herpes Progenitalis	1	1			
Total	37	9	22	5	1

Responses—++++ - Excellent; +++ - Good to excellent; ++ - Fair to good; 0 - Poor



corporated with hydrocortisone (Lida-Mantle HC)\* and studied by your author in a variety of dermatoses (Table 1). Thirty-one patients applied the creme, usually twice daily for two to three weeks. Twenty-five experienced good to excellent results. One patient experienced poor results. No evidence of sensitivity was noted. All patients liked the spread and cosmetic character of the preparation.

The advent of effective anti-inflammatory antipruritic combinations are welcome additions to physicians' arsenals of therapeutics.

However, the search for etiology or causations should never be relaxed by the physician even if the patient is afforded relief.

Summary—A new combination creme of hydrocortisone and topical anaesthetic lidocaine in the Acid Mantle base\* has proved beneficial in thirty cases of varied dermatosis which are often resistant to topical hydrocortisone or anaesthetics alone.

\*Lida-Mantle HC, Dome Chemicals, Inc., New York, N. Y.

\*Lida-Mantle, Dome Chemicals, Inc., New York, N. Y.

REFERENCES

(1) Wiedling, S.: Xylocaine, the pharmacological basis of its clinical use. Stockholm, Almqvist and Wiksell, 1959.  
(2) Freeman, C. W.: A new topical remedy useful in the management of pruritis. J. Nat. M. A. 53: 151, 1961.

# MEDICAL COLLEGE CLINICS

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## THE MEDICAL COLLEGE OF SOUTH CAROLINA

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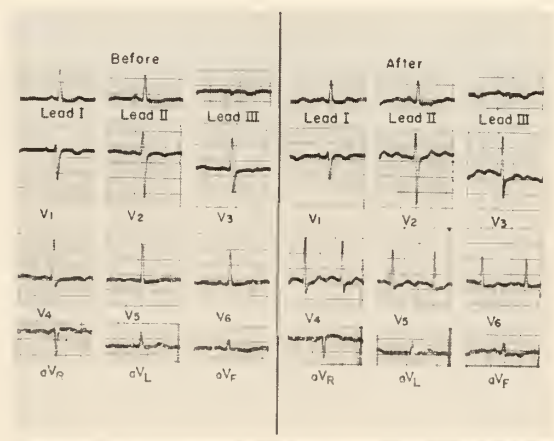
### ELECTROCARDIOGRAM OF THE MONTH

#### T-Wave Disease

DALE GROOM, M. D.  
Department of Medicine

*Case Record*—During a particularly stressful week of activity a 35 year old lady complained of a vague discomfort in her mid-chest with paresthesias, weakness and giddiness. She was examined by a physician who, according to her, mentioned heart disease among several possible causes and advised rest.

Her symptoms and anxiety increased over the ensuing months and she consulted several other physicians, had many electrocardiograms and laboratory tests. On one occasion she was admitted to a hospital where a borderline value of serum transaminase was reported (following, however, an injection of Demarol). No clear-cut diagnosis of heart disease was ever established but there was some divergence of medical opinion pro and con despite a very thorough cardiac evaluation which was negative. Invariably the patient herself seized upon whatever suggestions and measures pertained to organic illness, so that ultimately she acquired a regimen of continuous anticoagulant therapy, nitroglycerin and rigid restriction of physical activity which she followed carefully for more than two years without improvement.



As the anxiety of the patient and her husband mounted her symptoms multiplied to include those of aerophagia, postural hypotension, and a sense of shortness of breath with dizzy spells, all characteristically worse during the premenstrual week and at times of fatigue or stress. Finally she was again told that her symptoms were functional and the anticoagulant therapy was discontinued, whereupon she became mildly depressed.

A review of her voluminous medical records over this three year period uncovered no objective evidence of cardiac abnormality other than various T-wave changes of a non-specific nature and sagging of S-T

segments with no more than 0.5 mm. depression in precordial leads following an exercise test.

Complete cardiac examination was negative as were barium studies of the esophagus and stomach. The blood levels of cholesterol, calcium, proteins, sugar, sodium, chlorides and potassium were within normal limits. Psychiatric opinion characterized her illness as one of considerable anxiety and depression in a basically obsessive-compulsive type of personality.

The patient's exercise tolerance was observed to be excellent in the performance of double the usual amount of exertion of a Master test. These tracings were made before and immediately after the exercise. *Electrocardiograms*—The resting tracing is normal except for flattened, diphasic or inverted T waves in several leads.

Following exercise the Q-T interval (best measured in lead I) decreases commensurate with the increase of rate to 120, U waves become quite prominent in most precordial leads where there is minimal depression of S-T segments and the T waves actually change in the direction of normal, becoming more upright.

*Discussion:* What might justifiably be called "T wave disease" is the familiar sequence of events typified above, stemming from a few symptoms plus an electrocardiogram showing various T wave changes of a non-specific nature. Too frequently in past years ECG diagnoses of "myocarditis" or "myocardial damage," based on such tenuous evidence, focussed unwarranted anxiety on the cardiovascular system and sometimes made invalids of physically normal individuals. Probably no subject in electrocardiography is as controversial as this but with the more recent insight into repolarization—and particularly with recognition of the effects of autonomic and electrolyte factors on it—the numerous functional aberrations of T waves are being more readily differentiated from those due to organic heart disease.

The T wave is at the same time the most sensitive

indication of myocardial abnormality and the most capricious of the electrocardiographic complexes. It is of course markedly altered by certain drugs, (e. g., digitalis, quinidine, propanthine, emetine), by endocrine and electrolyte (especially potassium and sodium) changes. Autonomic stimulation can in some individuals significantly affect conduction (P-R interval) as well as repolarization. The influence of physical factors is illustrated in the classic experiment of Wilson demonstrating actual T wave inversion in normal subjects after drinking ice water. A few adults for some reason retain the diphasic or inverted T waves of childhood (the "retained juvenile pattern"), while others show marked ECG changes in different phases of respiration or following a full meal or on going from the supine to the erect position. The particular type of T wave variation seen in this patient has been ascribed to a shift of potassium across the cell membrane in response to stress. All these factors can operate independently of any coronary or myocardial disease.

Against a diagnosis of coronary insufficiency here is the absence of any abnormality in the QRS complexes or in atrial conduction, the unchanging pattern in the patient's many electrocardiograms over a three year period and of course the rather atypical nature of her symptoms and their obvious focus on cardiac action. Admittedly her anxiety might well have become focussed on the gastrointestinal or reproductive system had it not been for the T waves but certainly the repeated examinations and tracings, the anticoagulant regimen with weekly prothrombin time tests, the imposed restriction of activities, and the opposing medical opinions very effectively fostered the functional illness.

To some patients the electrocardiograph must be little short of a magic machine pouring out oracles with every lead.

*Observations on digitalis intoxication*—P. L. Rodensky and F. Wasserman. Arch Intern Med. 108:171 (Aug.) 1961.

To study the various facets of an apparent increase in the incidence of digitalis cardiotoxicity, a 1-year, preplanned study was undertaken in a general medical hospital. Assessment of the total clinical situation in each patient was critically important for establishing the proper diagnosis. Rapid diureses, failure to individualize digitalis dosage, and attempts at short-cuts in therapy precipitated many of the 92 separate episodes of digitalis intoxication observed in the 88 patients studied. Thirty-one patients developed cardiotoxicity while receiving digitalis combined with chlorothiazide or hydrochlorothiazide. An active myocardial process, chronic lung disease, chronic renal disease, electrolyte imbalance, and various forms of heart disease served as predisposing factors. Withdrawal of digitalis and oral or intravenous administration of potassium chloride proved efficacious in treating most digitalis-induced ectopic rhythms. The over-all mortal-

ity was 28%, with 11% of deaths resulting solely from digitalis overdosage.

*Chronic phosphate disappearance in cirrhosis of the liver and congestive heart failure.* Cheves McC. Smythe, M. D. (Charleston). J. Lab. & Clin. Med. 57:927-937, June 1961.

Disappearance rates of colloidal chromic phosphate in patients with cirrhosis of the liver, congestive heart failure, and miscellaneous diseases of the hepatobiliary system have been compared with those in normals. When these disappearance constants are used for calculation of hepatic blood flow, rates of flow approximating those obtained by other methods are found in normal individuals. There was no change of disappearance rates in the presence of severe hepatocellular disease. Other variables must be involved in determining colloid disappearance rates which might invalidate their use for studying hepatic perfusion in clinical hepatocellular disease.



## President's Page

With all the fall and winter holidays coming on, it was very befitting that the Governor should call a meeting on Highway Safety in Columbia on September 19. Certainly such a meeting is past due in this state, and it is very fortunate, too, that the State Medical Society has already gotten its house in order, to help and work with the Governor in the promotion of this phase of reducing the death toll on the highways of this state. A very excellent report was rendered to the House of Delegates of the Association last April in Charleston. At that time the Committee recommended the use of seat belts, and that the recommendation be made through the proper channels to the automobile manufacturers that seat belts be placed on all late model cars at the assembly plants. A similar recommendation was made at the AMA meeting in New York this past June.

It seems that the idea has or is beginning to take hold all over the nation. Recently it has been noted that several states have placed these seat belts on all motor vehicles operated by the various states, and just within the past few days, that the State Highway Department has announced that just such a step would be taken here in South Carolina.

It is estimated that with the use of seat belts, that approximately 5000 lives may be saved annually, and that the injuries incurred in automobile accidents may be reduced by many thousands. These figures were given by Dr. Luther L. Terry, the Surgeon General of the Public Health, and seem to be very conservative. To those of us that have seat belts and use them, it is a very comforting feeling to know that you have a better chance of survival, if you should be involved in an accident, and certainly a doctor in his rounds of work is very vulnerable. If you are not one of those having this safety feature in your car, you should look into the matter.

Charles N. Wyatt



# Editorials

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## FOUNDERS' DAY IS HERE AGAIN

That venerable institution, Founders' Day at the Medical College, will be held on November 2 and 3, when a large attendance is expected in Charleston.

Founders' Day was inaugurated by Dr. Robert Wilson in 1934, and was then a one day session which included a number of clinical presentations and a banquet garnished with some prominent speaker. In 1942 the meeting was expanded to three days' duration and was arranged, organized and financed by the Alumni Association, at that time under the enthusiastic presidency of Dr. James Fouché of Columbia. The Association continued to support and produce this "refresher course" for a number of years until the Medical College offered to resume its costs and management.

This session offers an excellent program, available to all the doctors of the state, or others interested. A full program is to be found elsewhere in this issue of *The Journal*.

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## DISASTER MEDICAL CARE

A Committee on Disaster Medical Care was recently appointed by the South Carolina Medical Association in convention. This committee consists of five members from throughout the state, all having shown previous interest in Civil Defense matters on a local or state level. The Committee has the purpose of increasing and encouraging medical efforts along civil defense lines, informing the profession of these efforts and soliciting their cooperation as well as keeping them abreast of new developments and recommended procedures, and coordinating these efforts with the national and state civil defense programs. In furthering this purpose several meetings have been held with state civil defense officials, and several recommendations have been made to the Executive Council of the Society.

It seems a definite likelihood, in view of world situations, particularly the Berlin crisis

and Soviet resumption of atmospheric nuclear testing, that an atomic disaster might indeed occur, either by intent or accident. Should such occur in a well prepared area the results would be disastrous, but should it occur in an unprepared area any survival would be extremely unlikely. Our state is grossly unprepared for such an eventuality. Marked but somewhat belated efforts are now being made to increase our preparedness. The survival of our society in an atomic disaster depends to a large extent upon the preparedness of our physicians and related health groups. Each of us would undoubtedly do all in our power to help our communities and state in a disaster, but unless we are cognizant beforehand of the proper procedures to follow in case of a disaster of this type, our efforts will be largely futile and quite possibly even damaging.

In an effort to increase our preparedness, your Disaster Medical Care Committee in cooperation with the State Civil Defense Agency and Dr. J. I. Waring, Editor of the *Journal*, begins with this issue a series of articles elucidating medical preparedness. It is hoped that each physician will read these articles, as our joint preparedness for survival depends upon our being individually informed.

Raymond E. Ackerman, M. D., Chm.

Robert S. Solomon, M. D.

Charles R. May, M. D.

William C. Herbert, M. D.

J. Graham Shaw, M. D.

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## FLU TO YOU

Dr. Luther L. Terry, Surgeon General of the Public Health Service, who is undoubtedly cognizant of the many unpleasant possibilities facing the world in the not too distant future, adds another note of gloom by predicting that there is likely to be an upswing in the influenza cycle which will hit this country during the fall and winter. For this particular threat to our lives and happiness he offers a strong piece of advice that those persons in

certain groups take the influenza vaccine, now well established as effectual, in order to avoid the mortality which influenza might cause directly or as a trigger.

Last winter in England flu caused more than 1,000 deaths and was indirectly the cause of several more thousands. While anyone may be susceptible, Dr. Terry points out that the greatest danger is for those people who have heart disease, pulmonary disease, diabetes or other chronic illnesses, persons over 65, and pregnant women.

Once influenza strikes a community it is too late to protect the high risk groups. Therefore the propitious time for the use of vaccination is now.

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### THE TWO EDGED SWORDS

During recent years two groups of drugs have appeared which are of special interest to the surgeon. Their claim to interest lies in the fact that they add to the hazards of any operative procedure in patients who have been taking them.

One of these is the steroid group. Most surgeons have been the victims of the complications which may result from the administration of these drugs. Wounds which would be expected to heal promptly remain in a state of suspended activity and are highly susceptible to separation. Overwhelming infections occur with insidious silence but when detected are frightening and uncontrollable. Sloughs reminiscent of the textbook pictures of noma occur and treatment is of no avail.

Another well known danger which results from the administration of these drugs is the hypotensive state which may appear during anaesthesia. This hypotension is very difficult to correct. It is true that measures which prevent the occurrence of this hypotension should

be instituted before anaesthesia is attempted but these measures entail giving more of the same or similar drugs. This fact puts the surgeon between the Scylla of hypotension and the Charybdis of nomadic slough, overwhelming infection and wound dehiscence. These statements may seem to have the taint of exaggeration but I do not believe that any surgeon who has been confronted with one of these nightmares would think so.

The next and most recent addition to the list are the group of reserpines, rauwolfias, and their cousins, the "tranquilizers". A veritable galaxy of these drugs has appeared and the list increases at such a rate that to keep up with the names taxes the memory of persons with total recall. They present a hazard to the surgeon in two directions. First, they are capable of inducing a hypotensive state during anaesthesia which is very refractory. This danger can be reduced if they are discontinued for ten days to two weeks prior to operation but the patient confronted with an emergency has the risk of his operation compounded. Second, these drugs have a dramatic hypotensive effect if given postoperatively in an effort to combat nausea, particularly in the patients on the borderline of shock. Again we have the Scylla of hypotension and the Charybdis of an "untranquil" state or nausea.

The moral of these remarks for the surgeon is that he be alert in his investigation of his patient to determine the administration of these drugs so that he may lay the blanket of protection about him more adequately. There is also a moral for the practitioner responsible for the giving of these medications. He should be keenly aware that they are two-edged swords, as are all drugs, but the effect of these on a surgical procedure can be especially disastrous.

George T. McCutchen, M. D.

# A REPORT TWO YEARS FOLLOWING THE CREATION OF A CHAIR OF GENERAL PRACTICE AT THE MEDICAL COLLEGE OF SOUTH CAROLINA

GEORGE C. DURST, M. D.  
PROFESSOR OF GENERAL PRACTICE  
MEDICAL COLLEGE OF SOUTH CAROLINA

## 1. Background and Preliminary Action.

The historical cycle of developments in the realm of scientific medicine and medical education in the twentieth century is well known and requires no repetition. One need only comment that rapid developments in the medical sciences led to the evolution of specialties and sub-specialties to the point where medical school faculties became made up exclusively of men who had sharply limited their fields of interest. This historical cycle has been completed now with the realization by many leaders of the medical profession that medical education had gotten out of balance when during a student's entire course of studies, he had no contact with a general practitioner representing to him this important segment of the medical profession. Many of these leaders, during the past several years, have written and spoken of their concern about this situation.<sup>1,9</sup>

It has been pointed out that the pure logistics of bringing to the public adequate medical care will continue to require physicians who are engaged in general practice. This need is not only in rural or sparsely settled areas but has also been sharply demonstrated in certain congested areas where over-specialization has resulted in instances wherein the public has felt itself at a loss to secure basic medical care.

These factors have been recognized and, to help bring a balance into medical education, several medical schools, including the Medical College of South Carolina, have created departments or sections of general practice. This is a report on the creation of the faculty position of Professor of General Practice at the Medical College of South Carolina and the related activities during the first two years.

The following are quotations taken from letters written by the President of the Medical College of South Carolina announcing the creation of a Chair of General Practice in this school and answering specific questions asked by a newspaper reporter. These extracts reveal the ideas held at the inception of this program. "... at its meeting on March 26, 1959, the Board of Trustees of the Medical College of South Carolina established the new position of 'Professor of General Practice,' . . . . This professorship is established . . . on a part time basis. . . . a separate department of general practice has not been set up, at least for the present. The appointment is within the department of medicine, and I am sure . . . will develop . . . in cooperation with and support of that department. Although this medical school aims primarily at the

preparation for general practice, assuming that any specialization will be undertaken by graduates as they may choose, heretofore there has been no defined area called 'General Practice' nor any title of that connection given."<sup>10, 11</sup>

## 2. Activities.

The following report was prepared by the Professor of General Practice and, having been approved in principle by the President of the college, was used as a basic statement of intent at the time of the announcement of the creation of this position:

"Announcement and a Statement of Intent.

"The Board of Trustees of the Medical College of South Carolina at its meeting on March 26, 1959 created, upon the recommendation of the President, the new faculty position of Professor of General Practice. The action thus taken gives a more formal recognition of the traditional importance this school has placed in the development of men interested in and qualified to enter into general practice.

"It is well understood and accepted that the complex scientific advances in the various fields of medicine require that these be taught by men who by specialization have largely limited their interests and their professional contacts to certain specific areas of medical science.

"Conversely the general practitioner by virtue of his intimate and long contacts with the home, family and community backgrounds of his patients (often including several generations of a single family) is perhaps best qualified to teach the students the ethical principles and some of the art of applying this scientific knowledge to the individual patients as seen in day to day practice.

"Practical topics for discussion include the following:

- (1) Selection of a location.
- (2) Selection of an office.
- (3) Office plans and equipment.
- (4) Partnership arrangements.
- (5) Office assistants.
- (6) Records.
- (7) Fees, billing procedures and policies.
- (8) General business and financial aspects.
- (9) Relations with other physicians and clinics.
- (10) Relations with hospitals and nurses.
- (11) Relations with pharmacists and drug stores.
- (12) Relations with patients and their families.
- (13) Office visits.
- (14) House calls.
- (15) Medical bag contents.
- (16) Handling telephone calls.
- (17) Handling the streetcorner and cocktail party 'patient'.
- (18) Recognizing and dealing with the drug addict.
- (19) Possible malpractice suits.
- (20) Cases involving possible litigations.



- (21) Handling insurance forms.
- (22) Referral of patients to governmental or charitable institutions to which they are entitled for care.
- (23) Handling the terminal patient and his family.
- (24) Demeanor and comfort to family at the death of a patient.
- (25) Professional organizations and postgraduate studies.
- (26) General community and civic responsibilities.

"The future specialist as well as the future general practitioner needs to become acquainted with the viewpoint and some of the rewards to be expected in general practice. The Professor of General Practice will stress to the student that the most effective application of modern medical science requires teamwork. Each member of the medical team must have a clear conception of his position and a proper respect for the other members of the team.

"The general practitioner's position is in the first line of defense. He should be supported by a team of well qualified specialists who will assist in the care or take charge of complicated cases when requested. The general practitioner should feel no hesitancy in seeking the assistance of the specialist, and the specialist should welcome assistance from the general practitioner in caring for his patients.

"The Professor of General Practice as an advisor to the students, and to the interns and residents, will assist them as they plan their training and postgraduate studies. It is hoped that some of his enthusiasm and respect for general practice will be transmitted to them.

"It is expected that the Professor of General Practice will maintain a close liaison with the general practitioners throughout the state and that they will consider him as their representative in the faculty of the Medical College. In this manner it is anticipated that this position will assist in the public relations between the Medical College and the Medical College Hospital and the general practitioners of the state."

It was desired early in the development of this program to make it clear to the curriculum committee and the other members of the faculty that the Professor of General Practice had no desire to invade areas of instruction that were already being covered. A copy of this basic statement of intent was sent with a letter requesting comments and suggestions to the members of the faculty to inform them of the thinking on this matter and to elicit their understanding, cooperation, and assistance. The response to this was both gratifying and helpful in that there was generous approval of the ideas expressed and many additional useful suggestions were made.

The program for the students has been developed

with deliberation and a keen awareness of the value of the medical students' time.

The Professor of General Practice has been one of twelve department and section heads to speak to the first year medical students in the series of lectures on "Clinical Correlation". The one hour lecture emphasized medicine as a profession requiring dedication, personal character and dignity, and high ethical standards. Orientation of the student and the physician within the profession was discussed.

The Professor of General Practice has been given the responsibility for the course on medical ethics for the second year medical students. This course begins at the time the students have their first contact with patients in the clinics and hospitals. Their studies of medical science which heretofore have dealt with test tubes and laboratory animals now have introduced the human factor and at this point much emphasis on ethics is in order.

This eight hour series of lectures is based on *Principles of Medical Ethics, Opinions and Reports of the Judicial Council of the American Medical Association*. Specific examples, actual or hypothetical, are used to illustrate the principles of medical ethics.

The following statement is quoted from the Medical College Catalogue for the year 1960-61: "General Practice—Instruction is given in the fourth year in the art and ethics of applying the principles of scientific medicine in general office, home, and hospital practice. Discussions are held on the selection of a location, partnership arrangement, building a practice, office management, and professional and personal financial planning".

The six lectures in this series are designed to invite attention to problems that may arise as one enters practice and to suggest courses of action which may be helpful. Much of the material discussed is illustrated by specific instances of actual experiences with patients. The business side of medicine is illustrated by reference to actual office records. A guest speaker with an outstanding reputation in organized medicine has been invited under the auspices of this course and has addressed the students on medical organizations and the importance of participation in their functions.

The Professor of General Practice has in addition to his normal teaching schedule participated as a member of several panel discussions.

### 3. Accomplishments.

The time is short for an evaluation of accomplishments. It does appear, however, that the action of the board of trustees in creating this faculty position, and in this manner giving formal recognition to the place of the general practitioner as an important member of the medical team, was in itself an accomplishment.

It is believed that this program helps to give the students better orientation within their profession. This is certainly needed by the future specialists as well as by those who plan to go into general practice.

The number of students who have requested conferences and guidance counselling concerning their future plans has been encouraging and especially en-

couraging has been the number who have indicated a desire to go into general practice.

The Professor of General Practice, as a member of the continuation education committee of the Medical College, has had special opportunities. He has served as a representative of the general practitioners of the state to the members of the faculty of the Medical College, and in turn as a spokesman for the faculty to the general practitioners. In this manner he has taken an active part in the public relations of the school and the Medical College Hospital.

#### 4. Planning.

- A. Preceptorships: The students of the Medical College of South Carolina have for many years held preceptorships on an informal basis. There is under study now a plan to have the Medical College co-operate with the committee on education of the South Carolina Chapter of the American Academy of General Practice to make preceptorship training more readily available.
- B. General Practice Internships: The American Academy of General Practice proposals for internship and residency training in general practice have been under sympathetic consideration but have not as yet been implemented in the hospitals affiliated with this school.
- C. General Practice Clinics: A General Practice or Family Clinic as conducted in connection with some schools has been studied. At the present time it is not considered that the clinical material here, although impressive in amount and variety, lends itself well to being separated into any group or groups simulating in any real manner what one might expect to see in general practice. The emergency room service here does give ex-

cellent experience in acute illness and traumatic cases.

Thought has been given to the possible value of the Student Health Service as a source of material somewhat resembling what may be seen in a general practice.

#### 5. Conclusions.

Basic logistical considerations make it obvious that the general practitioner will remain the backbone of the medical profession during the predictable future.

- A. It is proper that the highly specialized areas of scientific medicine be taught by those who, by specialization, have limited their spheres of interest. A medical school faculty should include one or more general practitioners as representatives of this important segment of the medical profession. This affords the student, both the future specialist and the general practitioner, in his formative years, an opportunity to gain a more complete picture of his profession and better orientation within his profession.
- B. The general practitioner on a medical school faculty has a proper sphere of influence in teaching the art, ethics, public relations, and financial aspects of the medical profession.
- C. The general practitioner on a medical school faculty has an important public relations role as a representative of the general practitioners of the area served by the medical school to its faculty and vice versa.
- D. The objectives of appropriate preceptorship training, family clinic training and general practice internships and residencies are recognized as desirable. Some progress has and is being made in these directions but the programs are as yet incomplete.

#### REFERENCES

1. Angrist, A.: Plea for two-year mixed internship for family physician and specialist. J.A.M.A., 172: 1637, 1960.
2. Brooks, T. J., Jr. and Rittelmeyer, L. F., Jr.: A course in problems of medical practice. J. Med. Educ., 34: 605, 1959.
3. Family physician: Editorial, J.A.M.A. 176: 942, 1961.
4. Garland, J.: The physician and his practice. Boston, Little, Brown and Co., 1954.
5. Guess, D. J.: The organization man of medicine. J. South Carolina M. A., 56: 351, September 1960.
6. Gundersen, G.: Medical responsibilities in a changing world. J.A.M.A., 170: 280, 1959.
7. Johnson, W. M.: The true physician. New York, MacMillan Co., 1936.
8. Rardin, T. E.: Medical students, family doctors and family practice. J.A.M.A., 176: 479, 1961.
9. Symposium on medical education: (Family practice) J.A.M.A., 176: 895, 1961.
10. Lynch, K. M., Sr.: Letter to the author, March 27, 1959.
11. Lynch, K. M., Sr.: Letter to Mr. Courtenav Carson, July 1, 1959.

## REPORT FROM AMA INSTITUTE— “MEDICINE IN ACTION”

A stimulating and self-questioning program, a keenly alert audience—these were the ingredients of the annual AMA public relations institute in Chicago, August 31 and September 1.

Leaders from the fields of medicine, religion, education, communications and government directed the program into channels of thoughtful study and self-analysis.

Under discussion was American Medicine in Action—the image it creates and the relationship of the American Medical Association to the individual physician.

Key problems were faced squarely and probable solutions were evaluated. Along with this “airing of problems” came the strong realization that there is much work to do, and that this work can be most successfully achieved through organization.

AMA offers the core of organization. It offers the tools. In turn it needs every thoughtful, dedicated physician in the United States to put these tools to good use.

Over and over again it was emphasized that much of AMA's work must be accomplished by members at the county and state levels. These workers will find that the strength of the national organization and its amazingly comprehensive facilities are readily available to them.

To back up its 10-point 1961 program AMA offers booklets, speeches, exhibits, films, newsletters, slide films, packets, individual reference services, manuals, radio scripts and television presentations.

The program, with its supplementary aids, is clearly indicative of AMA's desire to serve both the public and the profession by solving current medical and health problems.

Under study are the following vital areas:

1. Costs of medical care.
2. Voluntary health insurance.
3. Help to the needy and near-needy.
4. Health of the aged.
5. Mental Health, including the sponsorship of the first National Congress on Mental Health.
6. Physician supply—student honors and loan program coupled with continuing doctor-recruitment efforts, expansion of medical schools, creation of new ones.
7. Research—encouragement of basic and long range research in medical sciences.
8. International Health — new programs involving missionary cooperation and other agencies to help improve the health of all peoples.
9. Preservation of freedom of patients and physician.
10. Health and safety education.

A tremendous amount of work is being done in all of these areas at the national level. And yet the final success of this program rests on the action that is taken at the state and county society levels. AMA has provided the leadership and the support. It would

be difficult to find another profession whose national organization offers so much tangible help. But, in the final analysis, the public image created by the American Medical Profession will depend on the individual physician and his diligence in fulfilling his obligation as a member of AMA.

If anyone should doubt the importance of this work he has only to review the fallacies which are often spread about AMA. These fallacies appear in newspapers, on radio and television. They are written or spoken because of misunderstanding, misinformation or lack of knowledge. Such fallacies can cause “brush fires” in varying degrees of destructiveness. Such a fire may break out anywhere, at any time. The national organization cannot be on the scene to quell each fire. This work rightfully belongs in the hands of the state and county societies. For this reason it is valuable to recognize the most persistent fallacies about AMA.

1. The AMA opposed Blue Cross when it was first proposed.
2. The AMA opposed the Social Security Act in 1935 when it was adopted.
3. The AMA is always “against” everything and never “for” anything.
4. The AMA exercises strong sanctions against individual doctors who speak up against AMA policy.
5. The AMA is a closed corporation (or conversely, a strong union) to which every physician is forced to belong and which controls the supply of doctors in this country.
6. The AMA is ruled by a small clique of doctors.
7. The AMA is against old people and the poor.
8. The AMA should not be mixed up in politics.
9. Doctors oppose the social security approach to medical care only because it would hurt their pocketbooks.

The facts to refute these fallacies are self-evident. Additional facts are readily available on request from AMA. Each physician in the United States strengthens his own position when he takes the time to refute them. It is a vital task in the creation of true and favorable public relations, or public imagery, which is the life blood of any profession or industry in our complex age. When the individual physician fails to take an active part in AMA work he is acting against himself and his fellow practitioners.

While American medicine faces many problems, the climate of the two-day clinic was optimistic. But it was emphasized over and over again that such optimism is warranted *only* if all AMA members work together. The importance of encouraging non-member physicians to join AMA was underscored. Their reluctance, for whatever reason, should be countered by invitation and by education.

Representatives of other professions who addressed AMA delegates spoke frankly of their impressions of the medical world. On the whole they are “friends in court,” valuable friends who will support American medicine at local, state and national levels.



At the same time, their laymen's perspective focuses on areas where hard work is needed if American medicine is to continue to flourish in the healthy climate of freedom, a freedom which has brought this nation the finest medical and health care standards in the world.

One individually poor image can do sufficient harm to require the work of an entire state society to repair the damage done to its corporate image. Thus each physician should be vitally concerned with his profession's public relations. He is, within his community, the image of American medicine.

Physicians who attended the two-day seminar, went

away impressed with this fundamental truth. At the final afternoon session informal round-table forums discussed many phases of AMA's work. The faces around these tables mirrored the earnest and enthusiastic desire of the individuals to carry on this work at state and county levels.

The AMA offers strength, sound organization and invaluable aids to its physician members. But these are dormant qualities until they are translated into "Medicine in Action" by the individuals who form the body of the American medical profession.

J. M.

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# Announcements

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## CIRCUIT COURSES

YOU are cordially invited to attend one of the 1961-62 Circuit Courses of the Department of Postgraduate Education of the Medical College of South Carolina.

A Symposium On

**RECENT ADVANCES IN CORONARY DISEASE**  
Under the auspices of the South Carolina Academy of General Practice.

Spartanburg, South Carolina Country Club  
Tuesday, October 24, 1961 5:30 - 10:00 P. M.

### SCHEDULE:

Symposium begins at 5:30 P. M.  
Refreshments and dinner 7:30 (Dutch)  
Discussion 8:30 to 10:00 P. M.

### FACULTY:

Dr. Dale Groom, Asst. Professor of Medicine  
Dr. E. E. McKee, Assoc. Professor of Pathology  
Dr. J. M. Stallworth, Assistant Professor of Surgery  
Dr. Edwin Boyle, Associate in Medicine

### Guest Speaker:

Dr. Ernest Craig, Associate Professor of Medicine,  
University of North Carolina School of Medicine  
Approved for 4 hours credit, Category 1, by the  
Academy of General Practice.  
R.S.V.P.—Dr. George W. Price, Jr.  
120 Hall St.  
Spartanburg, S. C.

A Symposium On

**THYROID DISEASES—DIAGNOSIS &  
TREATMENT**

Under the auspices of the South Carolina Academy of General Practice and the York County Medical Society.

Rock Hill, South Carolina Elks Club, Main Street  
October 25, 1961 5:30 to 10:00 P. M.

### SCHEDULE:

Symposium begins at 5:30 P. M.  
Refreshments and dinner 7:00 to 8:00 P. M.  
Discussion 8:00 to 10:00 P. M.

### FACULTY:

Dr. John Buse, Assistant Professor of Medicine  
Dr. Maria Buse, Instructor in Chemistry  
Dr. R. R. Bradham, Acting Chairman, Dept. of Surgery

### Guest speaker:

Dr. Wayne V. Greenburg, Assistant Professor of  
Medicine, Medical College of Georgia  
Approved for 3½ hours credit, Category I, by the  
Academy of General Practice.  
This presentation is supported by a grant from Eli  
Lilly Company for postgraduate medical education.  
R.S.V.P.—Dr. Frank Kiser  
1251 W. Oakland Avenue  
Rock Hill, South Carolina

## AMERICAN CANCER SOCIETY'S SCIENTIFIC SESSION PROGRAM

Biltmore Hotel, N. Y. — October 23-24, 1961

The Physician and the Total Care of The Cancer Patient.

Inquiries concerning this program should be addressed to Director, Professional Education, American Cancer Society, Inc., 521 West 57th Street, New York 19, N. Y.

The State Board of Medical Examiners of South Carolina now has an official directory containing the Medical Practice Laws of the State of South Carolina and a list of all the licensed physicians within the state. The list gives the physician's license number, name, type of practice, and the address. This information is printed as it appears in the records of this Board. The Board feels this is a necessary service; your support will be appreciated. The directory is available at \$2.00 per copy. Please make remittance to:

STATE BOARD OF MEDICAL EXAMINERS  
OF SOUTH CAROLINA  
N. B. HEYWARD, EXECUTIVE SECRETARY  
1329 BLANDING STREET  
COLUMBIA, SOUTH CAROLINA

## FOUNDERS' DAY 1961

This annual occasion is one of importance professionally and socially to the alumni of the Medical College of South Carolina and, we hope, to all the doctors in the State.

The scientific programs arranged for this year will feature speakers on a wide variety of subjects. Every person attending is sure to find something that will be of benefit to him in his practice—cancer, heart, abnormal pregnancies and conception control, hypertension, crash protection of air transport and automotive vehicle occupants, asthma and emphysema, diabetes, are some of the fields of interest on the program.

The Alumni Luncheon and the evening reception and banquet make this occasion in the year a festive one always enjoyed by those who attend. Make a note

on your calendar now — FOUNDERS' DAY is NOVEMBER 2, 1961.

## S. C. CHAPTER OF THE AMERICAN COLLEGE OF SURGEONS

The South Carolina Chapter of the American College of Surgeons will hold its annual meeting in the Amphitheater of the Medical College Hospital on Wednesday, November 1, 1961, at 4 P. M. Dr. John Steinhaus, Professor and Chairman of the Department of Anesthesiology at Emory University, will talk on "General anesthesia as a cause of cardiac arrest" and Dr. Michael DeBakey, Chairman and Professor of Department of Surgery at Baylor University, will talk on "Renal revascularization". The surgical resident who wins the contest sponsored by the Chapter will read his paper at this meeting.

## FOUNDERS' DAY PROGRAM

November 2-3, 1961

THURSDAY, NOVEMBER 2nd

### MORNING SESSION

Presiding, Dr. Henry F. Ross, President, Alumni Association of the Medical College of South Carolina

8:30-9:00—REGISTRATION

Greetings—Dr. John T. Cuttino

9:15—Traumatic Maxillofacial Injuries

Dr. Robert F. Hagerty

9:30—Systemic Effects of Local Anesthetics—Toxic or Therapeutic

Dr. John E. Steinhaus

10:00—Management of Abnormal Uterine Bleeding With New Progestational Steroids

Dr. Robert W. Kistner

10:30—Question Period

10:45—COFFEE BREAK

11:00—Our Knowledge of the Pituitary as of 1961

Dr. Edward H. Rynearson

11:30—Surgical Treatment of Occlusive Disease of the Carotid and Vertebral Arteries

Dr. Michael E. DeBakey

12:00—Question Period

12:30—ALUMNI LUNCHEON—Alumni Memorial House

### AFTERNOON SESSION

2:00—Assembly in Baruch Auditorium for Assignments (all in Medical College Hospital)

Schedule:

2:30—Clinical Conference #1—Nurses Classroom, 2nd floor

Subject: The Difficult Diabetic—Dr. John Buse

2:30—Clinical Conference #2—Hospital Amphitheater

Subject: Circulatory Insufficiency of the Lower Extremities—Dr. J. Manley Stallworth

2:30—Clinical Conference #3—Board Room, 2nd floor

Subject: Management of Asthma and Emphysema—Dr. Kelly T. McKee

2:30—Medical Ward Rounds—6th floor

Surgical Ward Rounds—5th floor

3:30—COFFEE BREAK—Cafeteria—2nd floor

4:00—Clinical Conference #1-B—Nurses Classroom, 2nd floor

Subject: The Difficult Diabetic—Dr. John Buse

4:00—Clinical Conference #2-B—Hospital Amphitheater

Subject: Circulatory Insufficiency of the Lower Extremities—Dr. J. Manley Stallworth

4:00—Clinical Conference #3-B—Board Room, 2nd floor

Subject: Management of Asthma and Emphysema—Dr. Kelly T. McKee

4:00—Pediatric Ward Rounds—9th floor Classroom

Obstetrical and Gynecological Ward Rounds—8th floor Classroom

### EVENING

7:00—ANNUAL RECEPTION and BANQUET, Alumni Association and Guests.

Francis Marion Hotel (Park in adjacent Sears parking lot)

Refreshments

Dinner, Presiding, Dr. John T. Cuttino, Acting President, Medical College of South Carolina

Vignette of a Founder—James Edwards Holbrook—Dr. J. I. Waring

The Challenge of Manned Space Flight—Colonel John Stapp, M. C., U. S. Air Force



*The Orthopedic Staff puts on a fracture Clinic with demonstration of newer methods of treatment. Drs. Siegling and Belser (in background) answer questions.*



*Demonstrations of Cancer Clinic instruments and techniques for office diagnosis of cancer. Dr. John Hauck wields the proctoscope.*

#### FRIDAY, NOVEMBER 3rd

##### MORNING SESSION

Presiding—Dr. Swift C. Black, President, South Carolina Chapter of American Academy of General Practice

9:00—Acyanotic Congenital Heart Disease—Roentgenologic Aspects

Dr. John J. Kane

9:30—The Twentieth Century's Best Diagnostic Tool in Cancer—Cytology

Dr. Robert J. Samp

10:00—True Hyperinsulinism vs. Functional Hypoglycemia

Dr. Edward H. Ryncarson

10:30—Question Period

10:45—COFFEE BREAK

11:00—Diagnosis and Treatment of Depressive Reactions

Dr. William C. Miller, Jr.

11:15—Crash Protection of Air Transport and Automotive Vehicle Occupants

Colonel John P. Stapp

11:45—CLINICAL PATHOLOGICAL CONFERENCE

Guest clinician—Dr. Wilson Greenc

Pathologist—Dr. H. Rawling Pratt-Thomas

12:45—LUNCH

##### AFTERNOON SESSION

Presiding—Dr. William M. McCord, President, Charleston County Medical Society

2:00—Cyanotic Congenital Heart Disease—Roentgenologic Aspects

Dr. John J. Kane

2:30—Newer Concepts of the Pathogenesis of Hypertension

Dr. Cheves McC. Smythe

2:45—Use of the Newer Progestins in Abnormal Pregnancy States and Conception Control

Dr. Robert K. Kistner

3:15—Question Period

3:30—COFFEE BREAK

3:45—Fat Embolism—Experimental Course and Treatment

Dr. Frederick E. Kredel

4:00—Panel Discussion on Nephritis

Dr. Cheves McC. Smythe, Moderator

Dr. Forde McIver

Dr. John R. Paul, Jr.

Dr. A. V. Williams



*The Dermatology Staff (here Dr. Kathleen Riley) presents patients with interesting dermatological problems — their histories, pathology, diagnosis and treatment.*



## SURGICAL COURSE AT EMORY

The Department of Surgery of Emory University is planning a Postgraduate Course in Cancer Chemotherapy, to be presented by authorities at Emory University Hospital, October 19 and 20, 1961.

In addition to the faculty members of Emory University, the following guests will participate:

Dr. Warren H. Cole  
Professor of Surgery  
University of Illinois  
Chicago, Illinois  
Dr. Robert K. Ausman  
Associate Director  
Roswell Park Memorial Institute  
Buffalo, New York

Dr. Robert Sullivan  
Director of Cancer Chemotherapy  
Lahey Clinic  
Boston, Massachusetts  
Dr. Julius Wolf  
Chief of Medicine  
Bronx Veterans Administration Hospital  
Bronx, New York

Those who are interested can request information from Dr. J. D. Martin at Box 459, Emory University, Atlanta 22, Georgia.

## AMERICAN HEART ASSOCIATION'S 1961 SCIENTIFIC SESSIONS TO INCLUDE 6 PROGRAMS ON CLINICAL CARDIOLOGY

Six sessions on clinical cardiology will be included in the 34th annual Scientific Sessions of the American Heart Association, to be held October 20-22 at the Americana Hotel, Bal Harbour, Miami Beach, Florida. A panel or symposium including related investigative work will be presented at each clinical session.

In addition, a total of 18 other scientific sessions will be held concurrently during the three day program.

As in previous years scientific and industrial exhibits will be on display.

Registration forms, which include applications for hotel reservations, may be obtained from the American Heart Association, 44 East 23rd Street, New York 10, N. Y.

## CHARLOTTE POSTGRADUATE SEMINAR OCTOBER 18, 19, 1961 PRESBYTERIAN HOSPITAL SCHOOL OF NURSING AUDITORIUM

c/o John Harloe, M. D., Chairman  
Suite 305, Hawthorne Medical Center  
Charlotte 4, North Carolina

### A Series of Lectures in OPHTHALMOLOGY

will be held in the Eye Clinic, Duke Hospital on September 9, October 20, 21, November 3, 4, 10, 11, 1961 and February 10, May 3, 4, 5, 1962.

All interested physicians are invited. For further information write J. Lawton Smith, M. D., assistant professor of Ophthalmology, Duke University Medical School.

## CONFERENCE ON DISASTER MEDICAL CARE TO BE HELD IN CHICAGO

The 12th County Medical Societies AMA Conference on Disaster Medical Care will be held in Chicago, November 4-5, at the Palmer House.

"A How Do You Do It at the County Level" is the basic theme of the national meeting which is sponsored by the American Medical Association's Council on National Security.

Information regarding the conference can be obtained by writing Mr. Frank W. Barton, Secretary, Council on National Security, American Medical Association, 335 N. Dearborn, Chicago 10, Illinois.

## AMERICAN ASSOCIATION OF INHALATION THERAPISTS

The above mentioned association will hold its seventh annual meeting and lecture series at the Statler-Hilton Hotel, Buffalo, New York, November 6-9, 1961. To register write Mr. Albert Carriere, Executive Director of the Association, 332 South Michigan Avenue, Chicago 4, Illinois.

## UNC SCHOOL OF MEDICINE FIFTH ANNUAL SYMPOSIUM NOVEMBER 9 - 10, 1961, CHAPEL HILL Postgraduate Course in Infectious Diseases With Emphasis on Methods of Diagnosis, Treatment and Prevention of the Common Infections

Staffed by the Divisions of Infectious Disease of the Departments of Medicine and Pediatrics of the UNC School of Medicine, with Dr. L. W. Wannamaker, University of Minnesota School of Medicine, as Guest Participant.

A Syllabus of Cases to be Discussed will be mailed to All Registrants in Advance.

## EMORY OPHTHALMOLOGICAL MEETING

The annual postgraduate meeting sponsored by the Department of Ophthalmology, Emory University School of Medicine will be held on Thursday, November 30 and Friday, December 1, 1961, at the Grady Memorial Hospital Auditorium, Atlanta.

Diagnostic methods of examination of the ocular fundus, clinical manifestations, differential diagnosis and pathologic anatomy of lesions of the vitreous, uvea, retina and optic nerve will be presented.

The guest lecturers will be Dr. Algernon B. Reese,

Clinical Professor of Ophthalmology, College of Physicians and Surgeons, Columbia University, New York, N. Y.; Dr. Charles L. Schepens, Clinical Associate in Ophthalmology, Harvard Medical School, Boston, Mass.; and Dr. Lorenz Zimmerman, Chief, Ophthalmic Pathology Branch, and Registrar, Registry of Ophthalmic Pathology, Armed Forces Institute of Pathology, Washington, D. C.

For further information write the Director, Postgraduate Education, Department of Ophthalmology, Emory University School of Medicine, 80 Butler St., S. E. Atlanta 3, Georgia.

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# Deaths

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## DR. HERBERT E. VAUGHAN

Dr. Herbert E. Vaughan, retired physician, died in a Columbia hospital after an illness of three months. He was a native of Timmons ville and had practiced medicine in Fountain Inn for the past 20 years.

Before coming to Fountain Inn, Dr. Vaughan had practiced at Reidsville in Spartanburg County. He was a graduate of the University of South Carolina and the South Carolina Medical College at Charleston in the class of 1911.

## DR. JOSIAH E. SMITH

Dr. Josiah E. Smith, eye, ear, nose and throat specialist in Charleston since 1920, died September 14 at his residence, 78 East Bay St. His age was 71.

A native of Charleston, Dr. Smith was born November 2, 1889. He attended the College of Charleston and the Medical College of South Carolina, receiving the degree of bachelor in pharmacy.

At the Jefferson Medical College in Philadelphia, he received his degree as doctor of medicine in 1916. He served on the staff of the Medical College and at Roper Hospital for a number of years.

In 1936, Dr. Smith was elected alderman, and represented Ward 6 on City Council. He was chairman of the Charleston Housing Authority from 1936 to 1960, when he resigned.

In the past, Dr. Smith had also been a commissioner for the Charleston Orphan House, the Charleston Free Library, and the Charleston Housing Commission.

He was a member of St. Philip's Protestant Episcopal Church, Kappa Alpha literary fraternity, Phi Alpha Sigma medical fraternity, Alpha Omega Alpha honorary medical fraternity; past master of Landmark Lodge No. 76, AFM; and he was a 32nd degree Mason of Scottish Rite.

He was also a member of the Medical Society of South Carolina, the South Carolina Society, the St. Andrew's Society, the American Medical Association, the Southern Medical Association, the Southeastern Surgical Society and was a fellow in the American College of Surgeons.

## DR. S. C. LIND

Dr. S. C. Lind, 75, retired surgeon died August 15.

Dr. Lind was born in Canton, Ohio, but lived most of his life in Cleveland, Ohio. He received his medical degree from Western Reserve University and finished cum laude.

He was president of Academy of Medicine of Cleveland, American College of Surgeons and the Cleveland Surgical Society. A veteran of World War II, he served as chief of surgery in the Naval Hospital, San Diego, Calif., also chief of surgery in major battles of the Pacific. He was also head of the surgical staff of Lutheran Hospital, Lake Wood Hospital and Deaconess Hospital, all of Cleveland.

He retired seven years ago, moved to Myrtle Beach and has been active in local medical activities since moving here. He was recently presented a distinguished service award from the medical staff of Ocean View Memorial Hospital.

## DR. E. C. HOOD

Dr. Eugene C. Hood, 65, of Florence, retired superintendent and medical director of the Florence-Darlington Tuberculosis Sanatorium, died August 19 after an illness of six months.

Dr. Hood was born March 9, 1896, in Hood Town Community in York County. He was superintendent and medical director of the sanatorium for 31 years until his retirement in 1960.

During World War I, he served in France with the United States Army.

He was a member of Central Methodist Church, Fred H. Sexton Post No. 1, American Legion, a charter member of the American College of Chest Physicians, Theta Kappa Psi medical fraternity and the American Trudeau Society.

Dr. Hood was a graduate of Wofford College, the College of Charleston, the Medical College of South Carolina (1930), with a degree in medicine and pharmacy, and attended the University of Toulouse in France. He taught bacteriology and pharmacology at the Medical College.

# News

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## RESOLUTIONS ADOPTED BY THE COLUMBIA MEDICAL SOCIETY ON THE DEATH OF DR. W. A. BOYD WILLIAM AUGUSTUS BOYD, M. D. 1881 - 1961

Whereas on early Wednesday morning, June 28, 1961, in Columbia Hospital, there passed to higher spheres of usefulness a gentleman, the pioneer of orthopaedic surgery in South Carolina.

There are few men of whom another can say "I love him", but Doctor Billy was such a one. Surely he was the best loved orthopaedic surgeon in his chosen specialty.

William Augustus Boyd, M. D., was born in Charleston, South Carolina, March 19, 1881, into a distinguished family, the son of the late Bernard and Joana W. Sherfese Boyd. He was graduated from Charleston High School, attended the College of Charleston, and was graduated from the Philadelphia School of Anatomy, and the University of Pennsylvania Medical School.

After receiving his medical degree from the University of Pennsylvania in June, 1903, he served an internship in Howard Hospital, Philadelphia, and was chief resident at the Philadelphia Orthopaedic Hospital.

Dr. Boyd began private practice in Columbia, South Carolina, in September, 1904. He served as city health officer 1910-1915.

On February 14, 1906, he was married to Miss Mary Sweat Keller of Meinhard, Georgia, who survives him. Out of this union, there was one daughter, Miss May Keller Boyd, who also survives him.

Dr. Boyd was Vice-President of the South Carolina Medical Association; President of the Columbia Medical Society; Orthopaedist to the Advisory Board, Selective Service; Orthopaedist to State Board of Health; Chairman, Advisory Board, State Board of Health; and Counselor, American International Society of Medicine.

Dr. Boyd was a member of the active staff of the Columbia, Baptist and Providence Hospitals, and consultant orthopaedist of Saunders Memorial Hospital, Florence, South Carolina.

Dr. Boyd has recently received a letter from Belknap recognizing him in the field of Crippled Children, and informing him that he had been elected a Fellow of the International Society of Surgery.

Although a young physician of the days when the general surgeon ruled supreme, he was a firm believer in specialization. Those who were privileged to serve him came under his spell at once, and when their preceptorship was over, they found that they had gained much knowledge and a lifelong friend. Age was a factor he scarcely recognized, except that he sought the company of the young rather than the old.

He talked to the young surgeon like a colleague. He was so capable of discussing surgical problems that almost as much surgery could be learned while talking with him as while watching him at work.

As a raconteur he was unsurpassed. At almost every gathering, he was called on to tell one of his famous stories, many of which were developed from his own experiences. He was master of many dialects and pantomime, and thrilled his audiences. As a host, he was most delightful. His chesterfieldian manner exhibited the charm of the old South.

Dr. Boyd's vision, ambition, knowledge, and surgical skill led him to greater attainments. He organized the Crippled Children's Clinic at Columbia Hospital in 1920. He had to appeal annually to the legislature for funds to carry on this Clinic. This work expanded and his interest increased with advancing years. This Clinic remained dear to his heart and he personally conducted it until the time of his death.

He was a member of the Columbia Medical Society, the South Carolina Medical Association, the South Carolina Orthopaedic Association, the North Carolina Orthopaedic Association, a member of the Georgia Orthopaedic Association, the Southern Surgical Association, Southeastern Surgical Congress, American Orthopaedic Association, American Academy of Orthopaedic Surgeons, American Medical Association, National Rehabilitation Association, American Association of Railway Surgeons, Southern Railway Surgeons, Association of Seaboard Air Line Railway Surgeons, Association of Atlantic Coast Line Surgeons. He had the distinction of being the only person ever to serve as president of all three of these railway associations. He was a Fellow of the American College of Surgeons. In 1960, he was elected president emeritus of the South Carolina Orthopaedic Association.

He was an honorary member of Blue Key, University of South Carolina Chapter. He received a citation for his contribution to selective service system by the President of the United States, Governor of the State of South Carolina, and the Senator from the State of South Carolina.

Dr. Boyd was a member of Trinity Episcopal Church, Columbia, South Carolina, a member of Kiwanis Club, Forest Lake Country Club, Pine Tree Hunt Club, South Caroliniana Society, Kappa Sigma Fraternity, Executives Club, and Columbia Cotillion.

Dr. Boyd was the author of many scientific papers which were published in various medical journals. In these publications he defended, defined, enlarged and modified with his own observations and experiences, the newer trends in orthopaedic surgery.

Dr. Billy, as he was affectionately known to his legion of friends, was distinguished not only in his profession, but his charm as a physician endeared him to everyone who had the good fortune to know him.



He lived for his patients and for his surgery. His patients adored him. The red rose worn daily in his lapel was furnished by a friend whom he helped in time of great distress.

A group of his friends, both within and outside the medical profession, arranged for a portrait of Dr. Billy which was presented to the Columbia Hospital and now hangs in the lobby of that institution. At ceremonies attending the unveiling of the portrait, tributes were paid which attested the love people in every walk of life had for him.

**THEREFORE, BE IT RESOLVED BY THE COLUMBIA MEDICAL SOCIETY:**

That the Society has lost a valued, distinguished and esteemed member, and that an era of medicine in this great City has been closed.

That copies of these resolutions be spread on the minutes of this Society and published in the *RE-CORDER*, and that a copy be sent to the family of Dr. Boyd with the expressed sympathy and regard of the Society.

Respectfully,

Charles H. Epting, M. D.

Theodore J. Hopkins, M. D.

James T. Green, M. D.

### **COLUMBIA MEDICAL SOCIETY**

The medical staff of the South Carolina State Hospital was host to the Columbia Medical Society for its scientific meeting on August 14, 1961. Dinner was served in the Benet Auditorium prior to the scientific program, where the tables were beautifully decorated by the Cherokee Rose Garden Club.

Dr. Weston C. Cook, President, opened the meeting, and extended a hearty welcome to all visitors in attendance. He expressed thanks on behalf of the members of the Society to the staff of the State Hospital for the pleasure of meeting with them for the August meeting.

Dr. Cook then turned the meeting over to Dr. William S. Hall, superintendent of the South Carolina State Hospital. Dr. Hall welcomed members of the Columbia Medical Society and guests, and then presented a brief progress report on the hospital's activities. It is anticipated that an approved residency training program in psychiatry will be realized in the not too distant future, Dr. Hall said, at the latest date, July 1, 1962.

Plans are presently being drawn up for a 200 bed receiving building, Dr. Hall informed the group. This building will be located immediately east of the the James F. Byrnes Clinical Center, and will include the physical facilities for the residency training program and other instructional programs.

With regard to funds available for patient care, Dr. Hall stated that the overall expenditure per patient per day at the South Carolina State Hospital is \$2.96, and that only the state of Mississippi spends less money per patient per day than our State. In 1960, 3,075 patients were admitted, he said, adding that

a great number of professionals (which includes doctors, nurses, aides, etc.) are required to provide the best possible care for the mentally ill in our state.

Dr. Hall then introduced the guest speaker, Dr. Robert H. Dovenmuehle, Research Co-ordinator, Duke University Center for the Study of Aging, and Assistant Professor of Psychiatry. Speaking on the subject "Health and Aging", Dr. Dovenmuehle emphasized that physical and mental difficulties, especially in the older age group, are closely interwoven. Patients in this age group tend to look upon physical difficulties as something they will have to live *with*, rather than something they will have to live *through*, he said, contrasting this reaction to that of younger patients who look forward to returning to their normal state of health. Helping these patients to learn to deal with their own reactions to their physical problems is an important factor for the doctor to consider in treating patients in the older age group, Dr. Dovenmuehle said.

### **COLUMBIA MEDICAL SOCIETY**

The November Scientific Meeting of the Columbia Medical Society will be held at the Columbia Hotel, Monday, November 13, 1961, at 7:00 P. M. The guest speaker will be Dr. Paul R. Lipscomb, Rochester, Minnesota, who will address the group on the subject "Prevention and Correction of Deformities of Arthritis". A graduate of the Medical College of South Carolina, Dr. Lipscomb is certified by the American Board of Orthopedic Surgery. He is a member of the American Orthopedic Association, Clinical Orthopedic Society, American Academy of Orthopedic Surgeons, American Society for Surgery of the Hand, and the American College of Surgeons.

The local speaker will be Dr. Hubert Claytor of Columbia, who will speak on "Some Unusual and Serious Problems in Severe Trichinosis".

All interested physicians are cordially invited to attend.

### **DR. MAULDIN BEGINS PRACTICE IN PICKENS**

Dr. David W. Mauldin is now associated with Dr. John M. Harden in the practice of medicine.

Dr. Mauldin is a native of Pickens, a graduate of Pickens High School, the University of South Carolina, of the Medical College of South Carolina, and served his internship at Walter Reed Hospital, Washington, D. C.

The new Pickens physician has had several years experience in medicine, having served a tour in the medical corps of the U. S. Air Force, with duty in Europe. In addition as serving as physician to Air Force personnel, he was also responsible for the health of their wives and children.

### **DR. COOK NAMED TO POST WITH CRIPPLED CHILDREN**

Dr. Weston C. Cook was appointed to succeed Dr. W. A. Boyd as orthopedic surgeon for District III of

the Crippled Children Division of the State Board of Health at the meeting of the Executive Committee on July 19.

District III is composed of Sumter, Newberry, Saluda, Lexington, Edgefield, and Aiken Counties.

Dr. Cook, a native of Pennsylvania, graduated from Lehigh University in 1936 and the University of Pennsylvania Medical School in 1940. He entered the Medical Corps of the Navy in 1940 and came to Columbia in 1943 where he practiced with Dr. A. T. Moore until 1950, after which he opened his own office.

Dr. Cook is certified as an orthopedist by the American Board of Orthopedic Surgery, is a member of the American Academy of Orthopedic Surgery and the American College of Surgeons. He is on the staff of the Columbia, Providence and Baptist Hospitals in Columbia and is chief of the orthopedic section of the Baptist Hospital. He is also orthopedic consultant to the U. S. Army at the Station Hospital at Fort Jackson and is president of the Columbia Medical Society this year.

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### CAMERON GETS MEDICAL DOCTOR TO FILL NEED

An essential need for the town of Cameron was filled recently when Dr. B. M. Lawton, Jr., a native of Estill, opened offices for the practice of medicine.

Cameron had been without a practicing physician since Dr. E. M. Borgstedt left some time ago to become associated with the State Hospital in Columbia.

After serving in the U. S. Navy Medical Corps from 1950 to 1954, Dr. Lawton attended the University of South Carolina and, in 1956, entered the Medical College of South Carolina, completing the course in 1960. He served his internship at the Medical College Hospital in Charleston.

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### SEVENTH DISTRICT MEDICAL ASSOCIATION

A meeting of the Seventh District Medical Association was held at Litchfield Beach Club, Georgetown, on September 21, 1961. The speakers were Drs. Peter C. Gazes, Harry W. Miins and Forde A. McIver, all of the Medical College of South Carolina. Current officers for 1960-61 were president, Dr. John Assey, Georgetown; secretary-treasurer, Dr. T. M. Davis, Manning; vice-presidents, Dr. A. C. Bozard, Bob Jones, Sedgwick Simons, John M. Rhame and Keith Sanders.

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### DR. CARROLL A. PINNER

The CARROLL A. PINNER bridge over the Broad River was officially opened on August 23, 1961, and dedicated to Dr. Carroll A. Pinner of Peak, South Carolina, who has served the communities on both sides of the river by walking the railroad trestle. The new bridge connects Newberry and Fairfield Counties

and in particular the towns of Peak and Parr. It is the restoration of an old colonial highway from North Carolina through Camden to Ninety-Six and satisfies local demands for it of long standing. The bridge has two spans, meeting on mile-long Hampton Island, one being 608 feet, the other 912 feet, and its total cost was \$414,080. Dr. James C. Kinard, former president of Newberry College, speaking at the dedication ceremonies, called the bridge the answer to Dr. Pinner's prayers, saying, "Only God knows how many times he risked his own life on that trestle in order to save others . . . but no patient ever heard him complain of how hard it was to get to his bedside. He always walked in as cheerfully as though he had just come across the street."

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### DR. HENRY J. STUCKEY

Dr. Henry Jefferson Stuckey, a native of Bishopville, completed a half century of medical service to his adopted community of Bamberg on June 30. Dr. Stuckey remembers the "good old days" of a one teacher school (and his first teacher is still living, Miss Mattie McCutcheon, now Mrs. Laddie Montgomery of Bishopville); a male academy, Catawba at Rock Hill; and the use of a horse, a horse and buggy, or a bicycle as he called on his patients. Dr. Stuckey took his pre-med training at Davidson College and was graduated in medicine from the Medical College of South Carolina in 1910. He has enjoyed a full life as a general practitioner, saying "I consider that I have done more for humanity as a general physician, and have come in contact with more people. If I had to live over again, I would still be a general doctor."

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Dr. Blanchard C. Phillips, Jr., upon his release from the Air Force entered upon the practice of general medicine in Williams in July. Dr. Phillips took his undergraduate training at Wake Forest and was graduated from Bowman Gray Medical School in 1957.

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Sammuel J. Segal, M. D., upon the completion of his Army service, has gone into general practice at Largo, Florida, where his address is 6916 One hundred fourteenth Street, north.

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After completion of three years in the Navy where he practiced occupational medicine Dr. Joe S. Matthews, III is now associated in the practice of general medicine with Dr. John Wilson in Darlington.

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### REWARDING SEASON FOR ORTHOPEDIC CAMPS

The South Carolina Orthopedic Camps, conducted by the State Board of Health, enjoyed a very rewarding seventeenth season, winding up with banquets on July 21 for the 98 physically handicapped children from the central and coastal areas.

Children eligible are those who cannot attend regu-

lar camps or who need the specialized environment for social adjustment. In many cases the young child "graduates" to regular camp after having the modified camp experience for one summer.

Camp offers an ideal opportunity for improving the child's skill in the activities of daily living. In the water, adaptations of standard American Red Cross strokes increase skills and provide needed exercise.

Two counselors work with each group of eight children and guide them in personal hygiene, self-care, and eating habits.

Staffs for both camps are carefully selected to supply mature understanding for the child in the small group.

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Dr. Norman S. Richardson, a native of Darlington, is engaged in a partnership practice of medicine in McCormick with Dr. C. H. Strom. Dr. Richardson graduated from the Medical College of South Carolina, Charleston, in 1957, interned at Columbia Hospital, and has been in Germany with the U. S. Army Medical Corps.

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Dr. Walter J. McMath, local medical physician who came to Hartsville to practice in the summer of 1956, has moved to his modern office building on Sumter Avenue.

Dr. McMath is a graduate of Howard University medical college and did resident practice at a North Carolina hospital before coming to Bennettsville.

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After the completion of a three-year residence in internal medicine at the South Carolina Medical College Dr. William M. Nelson, formerly of Williams, has returned to Walterboro, where he has opened an office in the EsDorn—Stokes Memorial Clinic Building.

Dr. Nelson will specialize in internal medicine.

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Dr. Vernon Barry Moore, Greenwood physician, gave the address at Lander College summer school graduation exercises Sunday, August 20.

Dr. Moore's subject was "What's the Hurry"? He is chief of Obstetrics and Gynecology at Self Memorial Hospital and is a native of Brownsville, Tenn.

Dr. Moore came to Greenwood in 1950. He is a diplomat of the American Board of Obstetrics and Gynecology, a fellow of the American College of Obstetricians and Gynecologists, and the American College of Surgeons.

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#### **TUOMEY X-RAY SCHOOL IS APPROVED**

The Tuomey Hospital school of X-Ray Technology in Sumter has again been granted approval by the American Medical Association it was announced by administrator James Case. Due to stricter requirements schools are reinspected every three to five years and are approved after evaluation of this inspection conducted by the AMA and the American College of Radiology.

Tuomey Hospital, having met all of the require-

ments, has been given approval for a total of six student X-Ray technicians. Two students are accepted each year in July.

#### **Two-Year Course**

The course in X-Ray Technique at Tuomey is for a period of two years. Applicants must be graduates of accredited high schools and one year of college is recommended but not required.

Students in X-Ray technique are taught anatomy, physiology, physics, chemistry, positioning and general X-ray techniques. Upon completion of the two year course, students receive a diploma and are eligible to take the National Board Examinations given by the American Registry of X-Ray Technicians. After passing this National Board Examination a graduate technician becomes a "Registered Technician."

Tuomey Hospital is one of the nine schools in South Carolina approved by the AMA for training X-Ray technicians.

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#### **CHILDREN'S MEDICAL CENTER**

Construction of The Children's Medical Center on the corner of First Street and Carolina Avenue, Hartsville was announced by its owners, Dr. Griggs C. Dickson and Dr. James C. Parke.

The building will be completed in approximately five months. Drs. Dickson and Parke recently opened their practice of pediatrics in temporary offices at 807 Carolina Avenue.

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#### **HOSPITAL UNIT AT FT. BRAGG**

Columbia's 446th General Hospital Army Reserve unit went to Fort Bragg, N. C. for two weeks of annual active training at Womack Army Hospital.

Personnel of the 446th was given on-the-job training right in the hospital, working side by side with regular Womack personnel.

The 446th personnel includes 10 doctors, eight nurses, and 23 students from the Medical College of South Carolina at Charleston.

The 446th is commanded by Colonel James G. Shaw, a Columbia physician. Colonel Shaw has commanded the unit since it was activated in 1957. He was commissioned in the Medical Corps of the Army Reserve in 1935, and during World War II he saw action in Europe.

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#### **COMMUNITY NEEDS DOCTOR**

Calhoun Falls, a community of approximately 2,500, needed a doctor badly according to an article in the Anderson Independent in July. Whether this need has by now been met we do not know. The newspaper article stated the town had formerly had two physicians and this was the first time in years it had been without a resident doctor. The nearest communities from which medical attention now has to be obtained are Abbeville, 15 miles away, Elberton, Georgia, 19 miles, McCormick, 25, and Greenwood and Anderson, 32. With an outlying population of more than 6,000 it is believed by the people of Calhoun Falls that their



community could well support one or two practicing physicians.

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### DR. ERIC MARVIN DIBBLE

Dr. Eric Marvin Dibble, now 83, almost blind and supposedly retired, is still in demand by patients who just refuse to give up his kind and knowledgeable services. Dr. Dibble, born in Charleston in 1878, has practiced medicine in Marion since 1903 and is considered one of the institutions of Marion. When the new wing of the Marion Memorial Hospital was opened to the public in July a life-size oil portrait of the physician was hung in its foyer, he having been for many years its chief of staff. Dr. Dibble visits the hospital daily and according to one of his patient's "If Dr. Dibble just comes in the hospital room and looks at us, we know we'll be all right—we have so much faith and confidence in him."

Dr. Dibble did his undergraduate work at the College of Charleston and was graduated from the South Carolina Medical College in 1900. He interned at Roper and began his practice in Greenwood with his uncle, Dr. R. B. Epting, but entered upon his own practice in Marion when an opportunity there presented itself. Except for a year in 1918 when he served in the Army Medical Corps, Dr. Dibble has faithfully served Marion. For ten years he was president of the State Board of Medical Examiners, on which Board he has served from 1924 to 1956; he has been president of the Pee Dee Medical Society and vice-president of the South Carolina Medical Association.

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Dr. Joseph Henry Cutchin of Easley is chairman of the Board of Directors of the state chapter of the American Academy of General Practice. Dr. Horace M. Whitworth of Greenville has been appointed to the standing committee of the Academy for the selection of the recipient of its Ross Award.

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### HOSPITAL ACCREDITATION MEETINGS

The matter of hospital accreditation is of vital interest to all practitioners who make use of the hospitals of the state, and also to those selected physicians or lay people who are members of the boards of these hospitals. Physicians who have not served on hospital boards have relatively little conception of the duties and responsibilities of board members. These two meetings to be held in October are intended to provide a gathering of hospital administrators, hospital board members, and physicians in general. All physicians are invited to attend and to take advantage of this opportunity to hear explanation of the problem of hospital administration from a top authority on the subject, Dr. Kenneth B. Babcock, director of the Joint Commission on Accreditation of Hospitals. All members of the Association are urged to attend.

One of these meetings will be held at the Greenville General Hospital on October 24, 1961, and the other at the Florence Country Club on October 25,

1961. Both meetings are scheduled at 7:00 p. m. and Dr. Babcock will make an address which will be followed by dinner for all present and a question and answer period after dinner.

The subject of the address will be The Program of the Joint Commission on Accreditation of Hospitals.

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Dr. M. T. Laffitte, Jr., formerly of Estill, has opened his office for the practice of Obstetrics and Gynecology at 1812 Hampton St. He will be associated with Dr. Heyward H. Fouche.

Dr. Laffitte took his pre-medical education at The Citadel in Charleston. He obtained his M. D. degree from the Medical College of South Carolina in 1955 and completed his internship there the following year.

Upon entering the service in July, 1956, he served in the Army Medical Corp practicing Obstetrics and Gynecology at Fort Jackson, and later at Fort Rucker, Ala.

After discharge from the Army he returned to the Medical College to complete his residency. The past year was spent as a Research Fellow in Obstetrics and Gynecology.

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Dr. C. Wallace Harper has opened offices at 7 S. Calhoun St., Greenville, after completing internship and post-graduate training.

A native of Greer, Dr. Harper took his pre-medical education at Wofford College and Duke University, graduated from the Medical College of South Carolina and served his internship at St. Louis City Hospital, St. Louis, Mo.

In post-graduate training he obtained a fellowship in hematology at Emory University School of Medicine, Atlanta, Ga. He is a member of Phi Rho Sigma medical fraternity.

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Dr. S. A. Greenberg of 234 S. Dargan St., Florence, announced he will be joined in his practice by Dr. Donald M. Gelb.

Dr. Gelb won a Ford Foundation Scholarship to the University of Chicago 1951 and 1952. He was graduated Phi Beta Kappa from the University of Rochester with a B.A. degree in psychology.

Dr. Gelb was graduated from Chicago Medical School in 1959, where he was a four year member of Phi Lambda Kappa.

Dr. Gelb spent 1959 and 1960 in rotating internship, and his residency was at Mt. Sinai Hospital, Chicago, in 1960 and 1961.

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Eugene F. McManus, M. D. announces the opening of his office at Highway 703—At Rifle Range Road, Mt. Pleasant. Practice limited to Pediatrics.

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Frank O. Bartel, M. D. announces the opening of his office for the practice of Pediatrics at 141 N. Dean Street, Spartanburg.

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Dr. Ambrose G. Hampton, Jr., is back in Columbia after two years in Paris where he has been practicing

internal medicine at the American Hospital.

Dr. Hampton will resume his medical practice in Columbia.

Dr. J. L. Altman, formerly of Charleston, has moved to Andrews and will engage in general practice of medicine.

Dr. Altman is a graduate of the University of South Carolina and the Medical College of South Carolina. After receiving his degree from the Medical College in 1957 he served his internship at the Orangeburg Regional Hospital and practiced for a short time in Charleston. Since 1959 he has served on the staffs of hospitals in Tennessee and Pennsylvania.

### **CONGENITAL HEART DISEASE PROGRAM**

In November 1959 a Congenital Heart Disease Program was established through a cooperative arrangement with the Heart Disease Control Section and the Crippled Children's Division of the State Board of Health. Any child under 21 years of age who is suspected of having a congenital heart condition and

whose family is medically indigent is eligible for diagnostic work-up at the Medical College Heart Clinic.

If the diagnosis of congenital heart disease is confirmed, the child is eligible for treatment under the auspices of the Crippled Children's Division, South Carolina State Board of Health. Children considered to be in need of this service may be referred by private physicians, Heart Disease Control Clinics, Rheumatic Fever Clinics, Health Departments, etc.

Application for this service is made through local County Health Departments to the Crippled Children's Division of the State Board of Health.

All children accepted on this program are referred to the Medical College Heart Clinic for special diagnostic procedures, treatment and surgery as indicated. The Medical College Heart Clinic schedules all appointments and works very closely with referring physicians and County Health Departments in treatment planning and follow-up care.

In addition to this service there are five Regional Heart Centers in the United States, sponsored by the U. S. Children's Bureau. Patients with congenital heart conditions may be referred to these Centers if and when it is considered advisable.

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## **Civil Defense**

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### **AMA "SUMMARY REPORT" AVAILABLE**

The AMA's Department of National Security will continue to fill requests from physicians without charge for quantities up to 25 of the "Summary Report on National Emergency Medical Care". A unit price of \$.25 will be charged for larger orders. Orders should be addressed to: Council on National Security, AMA, 535 North Dearborn Street, Chicago 10, Illinois.

### **MANAGEMENT OF MASS CASUALTIES COURSE**

Under the quota allotted to the AMA Council on National Security by the Army Surgeon General, spaces are still open for physicians to attend the above course at Brooke Army Medical Center, Fort Sam Houston, Texas, on the following dates: November 13-17, 1961; February 5-9, 1962; and April 2-6, 1962. Physicians who desire to attend any of these courses are requested to write directly to the Council on National Security. Names and addresses of those desiring to attend must be furnished by the Council to the Army Surgeon General not later than four (4) weeks prior to the scheduled course date.

### **CIVIL DEFENSE EMERGENCY HOSPITAL PROGRAM**

Charleston was the 26th city in South Carolina to be allocated a \$100,000 Civil Defense Emergency Hospital.

The Charleston unit is one of three training hospitals used to train medical and allied health personnel in techniques of establishing and operating the emergency medical facility. The other training units are located at Greenville and Columbia.

Charleston has also been selected as a possible site of a prepositioned hospital. Additional prepositioned hospitals are being allocated by DHEW during the present fiscal year. This type of unit is stored for use only in an extreme emergency and is not used or displayed as are the three training units. Prepositioned hospitals are strategically stored throughout the state at the following locations: Anderson, Bennettsville, Dillon, Columbia, Florence, Kingstree, Lancaster, Laurens, Moncks Corner, Newberry, Rock Hill, Saluda, Spartanburg, St. George, Sumter, Walhalla, Walterboro, Ware Shoals, Winnsboro.

The 200-bed Civil Defense Emergency Hospital is designed to provide emergency medical care facilities to casualties in time of major natural or man-made disaster. This emergency medical unit would be one of the principal lifesaving tools available to physicians in the event of a major disaster. It is possible that the beds it contains would provide over one-half the usable hospital beds remaining after a mass thermonuclear attack.

This unit is a "packaged" hospital containing all the equipment essential for operating a 200-bed general hospital. Although items such as X-ray units, operating tables, cots and surgical instruments are plain in design, they are comparatively inexpensive, rugged and functional.

Not intended to supplant—but rather to augment—permanent hospitals, the unit is primarily intended to replace hospital facilities destroyed or made unusable in a national emergency.

The emergency unit could be used in any of the following ways:

1. As an auxiliary to an already existing hospital so as to increase the hospital's capabilities quickly under emergency conditions.
2. As a self sufficient facility where no other hospitals are available.
3. As an auxiliary to an already prepositioned civil defense emergency hospital.

The Civil Defense Emergency Hospital is an adaptation of the Surgical Hospital Mobile Army (SHMA) unit developed during the Korean War. Its supplies and equipment have been field tested under severe conditions since they were originally designed for military use. Continuous improvements have been made since 1952, and the hospital has been adapted to civilian rather than military needs.

Major components of the hospital include:

1. Three operating tables, operating lights, surgical instruments needed for basic surgery and anesthesia apparatus.
2. Wards equipped to meet the basic medical needs of 200 bed patients.
3. X-ray equipment complete with its own portable generator and transformer.
4. Pharmacy supplies which include antibiotics,

heart and respiratory stimulants and intravenous solutions. (No narcotics are included.)

5. Laboratory supplies which include material to perform tests for blood typing, hemoglobin determination, clotting time, and routine urinalysis. (No microscope is included.)
6. Sterilizing supplies which include nine pressure-cooker type and six boiling type sterilizers.
7. Central Supply provides a re-supply capability in support of all functional departments.
8. A 15-kilowatt generator to provide auxiliary power if local electrical supply is disrupted.
9. A portable 1500-gallon water tank and pumping equipment.

Supplies and equipment (8,000 individual pieces) for the hospitals are maintained through continuous procurement programs and by rotation of certain supplies (drugs) as they become outdated.

No canvas is included as the unit is ordinarily stored and operated in a building such as a school which can be readily converted into an emergency hospital.

The entire hospital weighs 24,000 pounds and is valued at \$100,000. An area of 25 x 25 feet is required for storage of the unit. It can be transported in one 40 foot van or several smaller trucks.

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## Book Reviews

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*THE CHRISTOPHER HAPPOLDT JOURNAL.* Edited with Preface and Biographies by Claude Henry Neiffeur, Associate Professor of English, University of South Carolina. The Charleston Museum, Charleston, 1960. Price \$4.00.

In the latter part of 1838 the Rev. John Bachman, eminent divine and naturalist, once of New York, then of Charleston, found that his health required a change of scene. Embarking for England and the Continent, he took with him as a companion and general factotum young Christopher Happoldt, a boy of 14, who was later to develop into an able and outstanding physician in Charleston. The Journal which Happoldt kept on these travels is the basis for this book, although actually the Journal is less important than the biographical accounts of John Bachman and of Christopher Happoldt.

Medical readers will perhaps be more interested in the account of Happoldt's life. After what must have been a very enjoyable experience in the company of Bachman and in the various contacts with scientific people of the day which were made by Bachman and less actively by his protege, Happoldt returned to Charleston and after some years graduated in medicine in 1851 at the Medical College of South Carolina. He then pursued his medical education in Paris and in Berlin, returning to Charleston in 1854, quickly becoming associated with the *Charleston Medical Journal and Review*, one of the early medical journals of the South and one which carried quite an influence

in its time. In the next year, Happoldt became the sole editor and assumed all the responsibility for the conduct of the journal. He appears to have been a man of excellent education with a scientific mind and a liking for intellectual society. Unfortunately for this tendency, family matters caused him to leave Charleston in 1858, and remove to Morganton, North Carolina, where he became a village doctor without the opportunities of fulfillment of his earlier promise. However, he still remained the willing volunteer in times of need, becoming a surgeon in the Confederate Army and being held as a prisoner for some time. Later he was to offer himself as a worker in the yellow fever epidemic in Memphis, and again in Vicksburg, where he himself became a victim of the disease.

The life of Bachman is detailed in respect to his literary, religious and scientific activities. Of major interest is his association with John James Audubon, whom he entertained extensively in his home and to whom he rendered great assistance in his ornithological excursions in the neighborhood of Charleston. His collaboration with Audubon in the production of *The Viviparous Quadrupeds of North America* is well known. Bachman girls married Audubon men, and Audubon named a warbler for Bachman as evidence of mutual esteem. Bachman's interests were numerous, his character estimable. The account of his life should be particularly interesting to South Carolinians.

J.I.W.



*FUNDAMENTALS OF CLINICAL HEMATOLOGY*. By Byrd S. Leavell, M. D. and Oscar A. Thorup, M. D. 503 pages. W. B. Saunders Company. 1960. Price \$10.00.

The need for a new text in hematology in view of the number already in existence is open to some question unless it fills a specific purpose or adds something heretofore not available. The authors of this book have attempted, therefore, to present the subject in a concise, brief, overall manner directed primarily to the third year student or busy general practitioner. Consequently a great deal of information is covered in a short space which allows only a cursory review of any particular topic.

The basic format is similar to other texts starting with a review of the morphology, maturation, and metabolism of the blood cells. This is followed by a short survey of 1) various types of anemias, 2) blood coagulation, 3) diseases of the white cells, and 4) a final chapter of hematological techniques. Brief case reports are presented to illustrate the various syndromes which unfortunately cannot show the protean manifestations of any of the disease states described and do not appear to add much to the overall value.

This book does have the advantage that it is up to date on many of the newer concepts in hematology such as the pathogenesis of various anemias, diagnostic techniques, and more recent modalities of therapy which are not included in older texts. It would seem to fill a limited need as a complete outline for students beginning clinical medicine and allowing them to get a general perspective. For a practitioner interested in a particular phase of hematology, however, it would appear to be too sketchy.

Charlton deSaussure, M. D.

*CURRENT THERAPY—1961*. Edited by Howard F. Conn, M. D. 806 pages. W. B. Saunders Company. 1961. Price \$12.50.

This, the thirteenth yearly edition of *CURRENT THERAPY*, is again an extremely helpful and informative review of the most up-to-date regimens in the treatment of various disease entities. The consulting editors are recognized authorities in their fields and do a splendid job in organizing their various sections. The problem of space results in only brief abstracts of various modes of treatment, but sufficient to be of value to the practitioner. It would seem that some subjects, such as hemorrhoidectomy, are too lengthy in that six pages for this subject versus only three pages for hepatitis is not a good division. Also, more space is devoted to treatment of skin diseases than to diseases of the cardiovascular system, which is not felt to be justified, in view of the relative incidence and importance of the two.

Normal limits of laboratory value are very helpful to have on hand, though occasional errors are noted—such as the value for the mean corpuscular hemoglobin concentration of the red blood cell, which is by mistake listed as 27-32 grams instead of in percent. The appendices give further helpful information of the

drugs discussed and conversions for pediatric dosages.

This book can be highly recommended to every practitioner as a rapid source of information for newer methods of therapy.

Charlton deSaussure, M. D.

*A SYNOPSIS OF CONTEMPORARY PSYCHIATRY*, 2nd Edition, by George A. Ulett, M. D., and D. Wells Goodrich, M. D. The C. V. Mosby Co., 1960, St. Louis; \$6.50, pages 309.

This synopsis on contemporary psychiatry is unusual in that it is brief enough to be classified as a synopsis and it is informative enough to be of value not only to the student or house officer, for whom it is planned, but also for any physician interested in this medical specialty. It is a happy balance between so-called organic psychiatry, and psychoanalysis.

The synopsis is well organized into the individual chapters. The index is adequate. Although the price of the book seems to be out of line for its size, it is a much more useful introduction to psychiatry than the usual standard textbook which inevitably is bogged down in theory. The book fills well the role indicated in its title.

Wm. C. Miller

*RECOGNIZING THE DEPRESSED PATIENT* by Frank J. Ayd, Jr., M. D. Grune & Stratton, New York, 1961. 135 pages, \$3.75.

This is a very handy, simplified and clarified book on the depressed patient, with an emphasis on the essentials of management and treatment. The main emphasis in the book is on the prevalence of various degrees of depression in the total medical picture. It is very detailed in the presentation, not only of the types of depression, but in the basic ideas of what a depression really is. The author emphasizes the fact that a great many depressives may be easily overlooked because of the dominance of the physical symptoms that may be persistent for several weeks or several months. As in all other medical type problems, the author emphasizes the importance of early diagnosis because of the simpler forms of treatment that are available today to blunt out the effects of depression, which can be very severe and lasting if allowed to go on undetected.

There is considerable discussion on the various theories, both organic and psychogenic, concerning depression and considerable differential review with other types of psychiatric problems, notably the wide variety of anxious type of patient.

Although the book tends to be, perhaps, a little too weighty on the descriptive side, it, however, has a good deal to offer in simple clinical understanding. For example; There is an excellent review of the type of questions that can be asked, in a relatively short time, that can point very clearly to a differential from the anxiety patient and as well from the psychosomatic patient. The main weakness of the volume, although not too important generally, centers on a deeper

(Continued on Page 458)

# Public Relations

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## EVALUATING THE CASE AGAINST SOCIALIZED MEDICINE

BY

DR. WILLIAM DE MOUGEOT

*Professor of Speech, North Texas State University,  
Denton, Texas.*

When some of my liberal friends heard that I was going to address a meeting sponsored by the American Medical Association, they urged me to "give 'em hell." I told them I wasn't running for President, and that while I was not going to Chicago to praise the AMA, I wasn't going there to bury them either. Not that I haven't reason to be mad at the medical profession. After all, the first thing that happened to me when I came into the world was that a doctor grabbed me by the feet, held me upside down stark naked, and slapped me on the bottom. Now was that any way to treat a college professor?

But I'm not mad at the medical profession. I say this because in the next few minutes you may suspect that you've got a Trojan horse in your midst. During the first part of my talk, many of you will be tempted to perform a headectomy on me. You see, as a student of argumentation—and I'm a student as well as a teacher in that area—my study of the arguments used by the medical profession in opposing compulsory health insurance have led to the conclusion that many of them are logically weak, and some of your pet beliefs are in for a bruising this morning. But I want to make it clear that I am *not* an advocate of socialized medicine. When I first began my doctoral dissertation at Cornell (The Argumentation in the National Health Insurance Movement) my inclination was to favor the proposals of the Truman administration; by the time I had completed my research, I was convinced that we ought not to adopt national health insurance.

However, it was not the arguments of the AMA that changed my mind; in fact, they often irritated me. It's rather significant that when the subject of compulsory health insurance for all citizens was being debated by the nation's colleges last year, the arguments which most frequently appeared in AMA literature were seldom used by the negative teams; they soon found that those arguments, with a few exceptions, could not withstand an informed, intelligent attack.

My purpose today, then, is to share with you my observations of the arguments most used by the medical profession, in order that you may perceive the weaknesses and the strengths, and the potentialities

for improvement, because, after all, we share a common goal—to solve the medical care problems of the American people without resorting to a system of socialized medicine. So when you feel like getting out the tar and feathers, forebear! Soon thereafter I'll be offering constructive suggestions. And remember, my analysis is primarily in terms of the logical validity of the case. The logician asks: How does an argument fare when subjected to the tests of evidence and reasoning—or to intelligent opposition? Many an argument that is logically weak should still be used when the audience is relatively uninformed, or when there is no opposition, because it may produce a favorable emotional response, which is often more effective than logical agreement.

First, I'm going to discuss some of the most commonly used arguments, pointing out the strengths and weaknesses of each; then I'll suggest some things you might do in both selection and use of arguments to present a better case when rational, rather than emotional, appeals seem to be in order.

Many of the arguments most commonly used are what we call "scare" arguments; they depend for their effectiveness not so much on their logical validity as on the emotional reactions they produce.

Typical of this category is the contention that national health insurance will be a step toward socialism. The assertion itself can't be denied and for those people who automatically reject anything bearing that label, this is a potent argument. The very name "socialized medicine" has been a big help in prejudicing the public against compulsory health insurance. Fortunately for the medical profession, most of the American people do react to that label. As John Galbraith points out in his book, *The Affluent Society*, our standard of living, for even the so-called lower classes, has risen to the point where we look with suspicion on anything that constitutes a change in our way of life. The fear of Russia adds to the potency of this argument.

For more sophisticated people, however, this argument has much less appeal. It's the most flagrant sort of propaganda—name-calling—and it has long since lost its respectability because conservatives have applied the label to almost all social legislation. Public education, social security, and minimum wage laws

Delivered at The American Medical Association Institute August 31, 1961, Chicago, Illinois.



have all borne the label; and while the unthinking person may reject compulsory insurance as "socialistic," you will frequently have to prove that this particular step is bad for other reasons.

A second argument that fits this category is that the federal government will control medical care and both patient and doctor will lose freedom. The American people quite rightly treasure their freedom and this argument, too, works well as long as it isn't subjected to close scrutiny. It has the additional virtue of being at least partly true, in that regulations to prevent abuses of the system would be inevitable and where there is regulation, there is irritation.

Well, what's wrong with it? First, in foreign countries and in virtually all proposals in this country, medical matters are in the hands of medical men—and any other system deserves to be opposed. That's one of the big objections to the King bill—it doesn't guarantee that the medical profession will control medical matters.

There are cases in which economy has limited freedom somewhat, but very rarely has it been shown that these restrictions affected the quality of care given. Second, it simply is not true that national health insurance would deny the patient free choice of physician. Of course, not everyone could have the best doctors, to prevent overloading; but does the average person have that privilege now? Economic barriers intervene. I might have preferred to have Dr. Spock as my pediatrician, but I couldn't afford him. Specialization frequently puts patients in the hands of doctors they don't know and they didn't select. But more important, let's look at the precedents: Harry Eckstein states in his book, *The English Health Service*, "No Health Service patient is compelled to go to any doctor but the doctor of his choice, no doctor is compelled to take on any patient he considers undesirable, and patients may switch doctors." While that statement is not 100% true, the essence of it is repeated by Ronald Winton in his description of the Australian system in the *British Medical Journal* of July 5, 1958. And that article goes on to say, "There is no state interference in where or how a doctor practices, provided he observes the usual ethical and legal requirements."

The point I'm making here is that this is a good argument with which to scare people, but you'd better not use it if you have an audience, or an opponent, who knows how foreign systems are run.

Let's take another popular AMA argument—that the quality of medical care will deteriorate. This is usually attributed to the overcrowding of doctors' offices, making it impossible for them to make adequate diagnoses or give proper care. I'm going to surprise you by telling you that that's a rather good argument. Of course it's true that much of the rush to the doctor that took place in Britain when they adopted their system was due to the backlog of real illnesses and needs that had accumulated when people felt they couldn't afford the care, but no complaint by English physicians has been so constant and so well

documented as that against the unnecessary calls, and the arbitrary demands and time-consuming paper work. Anyone who knows the American people knows that they'll abuse any system which seems to offer them something for nothing. Doctors have hypochondriacs now, but the privilege will no longer be restricted to the wealthy. Add those who will run to the doctor with every trivial problem, and those who really have put off needed care for economic reasons, and you have an inevitable large increase in demands. If the number of doctors remains constant, simple arithmetic tells you that some of them are going to be rushed; if the number of doctors increases a lot, there is likely to be a reduction in the caliber of person practicing medicine—either way you lose some quality.

However, be prepared for some argument on this point. In the first place, the person who has put off needed medical care because of costs will prefer second rate care to no care; secondly, there is much to be said for the preventive value of frequent visits to the doctor. In Britain, while 79% of the doctors complained of frivolous calls, 71% felt that the system helped them to head off serious illnesses. I could cite many testimonials that the problem of malingering is not serious in Great Britain, and one of the more objective surveys of Britain's system, made by Dr. Paul Gemmill, a professor of economics at the University of Pennsylvania, found that only 13% of the patients questioned felt that care was of poorer quality under the national system, while 37% said they were getting better care. People from England to whom I have spoken all concur; quality of care is satisfactory.

A common error in using this argument is to compare American care with British, and conclude that care had deteriorated there. We have far more doctors per 100,000 population; we have better food and housing; British doctors have always been rushed, and the care in Britain has never been as good as ours. When you compare British medicine before they introduced the national health system to what it is today, you get a picture quite different than when you compare it to American medicine.

The argument that such a system will be expensive is another that has much truth to it, and can be effective if not exaggerated. The British, the New Zealanders, and others are finding the system to be more expensive than anticipated, and quite a drain on the treasury. We now spend 5.2% of our gross national product on medical care; imagine what it will cost to give complete care to all, plus the unnecessary demands.

But again, a few words of caution. For all the talk of high costs, Britain spends only 4 to 4½ of its national income on the health service to give complete care to all, while we spend even more for much less care quantitatively, and their percentage is going down while ours is rising. They spend \$50 per person for a rather complete system, while we spend \$114 per person for partial care. Furthermore, costs must be related to what's purchased. You might object to



paying \$10 to obtain a date for the evening, but not if you got Marilyn Monroe. In Britain, a medical tragedy is no longer a financial disaster and you can't put that feeling of relief into dollars and cents.

A third caution: In a debate, don't treat the taxes which support such a system as if they would be an *additional* burden on each American; most such taxes would merely replace what is now spent on medical care, but under other names. Finally, beware the common assertion that the health dollar would be largely wasted on bureaucratic expense. The overhead for Social Security is 6%; Britain estimates it costs 12¢ per dollar to run its system. Compare this to the average expense of 25%, including profit, of private health insurance.

In 1958, voluntary plans, including Blue Cross and Blue Shield, took in 5.9 billion and distributed 4.7 billion in benefits; 20% went for something besides medical care.

Ultimately, many of the scare arguments against socialized medicine come down to saying that it has failed in foreign nations and therefore we should avoid it here. As you may have noticed from some of my preceeding statements, this argument is not entirely valid. It reminds me of the person who declared to a surprised press conference, "The reports of my death have been grossly exaggerated." There is no doubt that there have been complaints, expenses, difficulties. It's easy to find evidence that national health insurance is not an unqualified success. It's quite another thing to argue that it has failed. There are demands for reform, but seldom for abolition, of the system. I wonder if it has ever occurred to the members of this audience that the United States is the only major nation in the world that does *not* have a national compulsory system of state payment for medical care. If the system is really as bad as it is usually pictured here, would 59 nations have adopted it; Wouldn't at least one abandon it? Wouldn't the conservative party in some nation rally all those discontented people to its cause by proposing to abolish that low-quality, high cost system? The fact is that while individual doctors complain, the British Medical Association accepts it in principle. I quote from articles reprinted in an AMA publication, *The Pill That Could Change America*: p. 13—"Of course, no one wants to see the Health Service done away with." p. 9—from a Conservative member of Parliament: "You know, we do not have a first class, only a second-class health system. However, before 1948 it was only fourth class."

In 1956 the Gallup Poll reported that 89% of the British people interviewed were favorable to the national health system, and surprisingly, almost 60% of the doctors said they found it reasonably easy to give adequate medical care. Ronald Winton reported in his article on Australia, "Despite certain defects, the National Health Service in Australia is working well." The Province of Saskatchewan, Canada, has had a favorable experience with such a system, and as

a result, most provinces in Canada have adopted the principle.

Does all of this mean we should join those nations which have some form of state medicine? Not at all, for reasons which I shall discuss shortly. But I'm trying to show you what you're likely to encounter if you assert in an argument with an informed person, that national health insurance has been a failure in other nations.

So far, we've been examining chiefly the arguments with a high emotional persuasive value, useful in situations, such as newspaper advertisements, when the listeners are largely uncritical, and where an informed opponent cannot present contrary information. Let's look at two which form part of the case against socialized medicine that have more logical validity.

One is the contention that it would be compulsory for all, regardless of need. Now that's the kind of thing people resent, particularly in an affluent society, where it's easy to believe that most people can handle their own problems. This argument is strong because it's true—the system would be compulsory for all. Sociologists and economists can demonstrate that a national compulsory system is justifiable and probably cheaper, but it's a difficult line of reasoning to present. To a large extent, arguments for compulsion rest on the objections to a "means" test for charity care, and while social welfare authorities deplore such tests, it's easy to argue that they're better than foisting on *all* the American people a bothersome, unnecessary system.

A second logically sound argument has to do with voluntary insurance as the solution to needs. The smartest move the AMA ever made in fighting socialized medicine was to change its policy in 1948 from opposition, to enthusiastic endorsement of voluntary insurance. Ever since then, the supporters of a compulsory national scheme have had to cope with the increasing evidence that voluntary health insurance can do the job.

Now don't misunderstand me; I'm not saying that voluntary plans *have* solved the problem, and if you choose to argue that way, you're going to take a beating. There are many statistics available to prove that many people are excluded, that policies have many exceptions, that rates are high for many people. The lower income groups, with the greatest health needs, are least able to afford good policies; very few policies, at any price, give really thorough coverage; the difference between the prices charged for care and the benefits paid by insurance companies often leaves the policyholder with a large medical bill. All in all, insurance last year paid only about one-third of the medical bills incurred by those who actually hold policies.

No, you can't prove that voluntary insurance has removed the need for change. But you *can* argue that it's well on the way. The growth of such insurance has been phenomenal, and I'm sure you've seen statistics about that. If you haven't, the AMA Communications Division would be happy to supply them. Just a few years ago, people over 65 couldn't get a policy;

you couldn't get insurance against dread diseases; one of our staff members ran up a bill of \$1000 when his daughter was born prematurely and had to be kept in an incubator—a contingency not covered by his policy. But just a few months later our group policy was enlarged and now it does cover such a case. So as long as you argue in terms of what can be done if we just give voluntary insurance a chance, you're on sound grounds.

Let's turn briefly to two arguments that are frequently used by the medical profession that are so easily answered, they're not worth using against an intelligent opponent.

One is that American medicine is the best in the world. First of all, that's not a reason for rejecting efforts to make it even better. Second, when we consider that Americans are better housed and fed, treated with better equipment, have more doctors, it's not surprising that we're the healthiest nation on earth; but that doesn't prove that our system of paying for medical care is responsible. Even the praise of scientific progress in medicine is no compliment to the fee-for-service system, since almost every medical advance has been made by a person on salary, often a government employee. And despite all this, American medicine is *not* the best by some criteria.

In death rate, we're surpassed by six nations, all of which have health plans run by the government. In infant mortality, we've slipped to 10th, and all nine nations ahead of us have one thing in common—the national government pays for medical care. To be sure, the American people on the whole are the healthiest, but that doesn't necessarily mean that our system of paying the bills is the cause of that health.

Finally, there's the argument that all who seek care will get it. That's true, with rare exceptions. But what it doesn't say is that they can pay the bills which follow. And it's the knowledge that for most people the bills *will* follow, that keeps many from seeking the care they should get.

Well, I've exposed some holes in the case against socialized medicine, but my purpose is neither to debate the topic nor to simply make the case look bad. Remember that most of the arguments we've examined work quite well on most people; it's only when facing more informed audiences, or arguing with an intelligent opponent who possesses some of the facts I've cited that the vulnerabilities I've mentioned become a problem. I sincerely hope that I *have* shaken your faith in some of these arguments, because it may save you embarrassment in some situation where these weaknesses are mentioned and you're unprepared for them. But there *are* ways of presenting a more logical case, so let's examine some of them.

The first problem is to avoid three errors of logic which commonly appear in arguments against socialized medicine: exaggeration, omission, and inconsistency. We frequently use words like *all*, *only*, *no-one*, and when we do, the opponent need only cite an example or two to damage an argument which would be perfectly valid if we just said *almost all* or *with*

*rare exceptions*. We're also prone to use statistics loosely. In *The Pill That Could Change America* (p. 6) we're told that a doctor may have no more than 3500 patients, that he's required to see 100 patients a day to make a living, and that he earns about \$4000 per year after expenses. But the average load is about 2200, only rarely have doctors seen as many as 100 patients in a day, and more reliable sources list the average income at \$7000, after expenses. The real figures are bad enough, so why exaggerate and risk exposure? This particular problem is especially acute when discussing voluntary insurance. Don't claim too much for it. I've already discussed this argument enough to indicate what I mean. There's a big difference between saying 123 million people are covered, and saying they therefore have no medical expense problems; and just because some companies offer good coverage for those over 65 doesn't mean that everyone over 65 can obtain that policy.

About omissions: of course I don't mean that you're obligated to present facts favorable to the other side. What I do mean is that you ought to beware of arguments that depend for their persuasive force on the listeners not knowing the qualifications that apply. This would apply to such arguments as mentioning high costs, when they're traceable to increased care; it applies to comparing foreign care with American care, hoping that no-one will mention that we have all the economic advantages, superior facilities, and more doctors; and it would apply in a case where you discuss the high administrative costs of national plans, hoping that no-one mentions the even higher costs of voluntary insurance.

Now for the inconsistencies: Be sure that two arguments used at the same time don't conflict with each other. For instance, it's a little difficult to say in one breath that doctors have a high sense of professional responsibility, and in the next breath say that if incomes are fixed, doctors will lose the incentive to practice good care.

In the AMA booklet *The Pill That Could Change America*, we find on page 5 the idea that in Baltimore people didn't seek care even when it was offered free, and on page 6 is the observation that doctors in England have been besieged by hordes of patients who aren't really sick. On page 8 we're told that the government requires a sparing use of x-rays, while on page 9 a British nurse is quoted as saying that some of the waste is due to "all those diagnostic x-rays".

In summary, you'll be less vulnerable to opposing refutation if you avoid exaggeration, be careful in your use of arguments that omit some data, and avoid inconsistencies.

My second major suggestion is to play down the arguments that have more emotional than logical appeal, when engaged in debate. Stress the difficulties of foreign nations, instead of claiming their systems are failures; speak of the future of voluntary plans, not of their alleged present adequacy; don't claim that patients will lose their choice of doctors, almost any



well informed opponent will be able to show that that assertion is not quite true.

Conversely, make more use of strong arguments. You can certainly argue that the total cost of medical care will increase, and you can play up the malingering argument. The reaction of the American people to the Newburgh, N. Y. welfare situation, surely demonstrates that most people resent having others abuse charity programs. You can also argue that the healthy will be paying for the care of the ill, an idea that may appeal to social scientists, but it certainly doesn't appeal to the healthy people—which means most people.

It seems to me that you ought to be able to make more use of the idea that it's silly to adopt a massive program for the whole country just to avoid embarrassment of a small percentage who don't like to apply for welfare care.

And there is one line of argument which *has* appeared in propaganda against socialized medicine, but with much less frequency than it deserves. I refer to the simple argument that most of the medical expenses we incur, and most of the ones we avoid, can easily be handled within our incomes if we would just readjust our scale of values. That's one argument that kept bothering me as I examined the arguments of those who favor socialized medicine. So many of the alleged needs seemed to boil down to an extra office call, or a matter of a hundred dollars. And I thought of the people who spend \$50 on a weekend of fishing while their children's teeth go without care. I even thought of the way I resented my doctor charging double what the Blue Shield allowed for an operation, and then spending twice as much for a second car.

Why, after all, should we adopt a national system for this particular need? How about cars, which have become a virtual necessity, or better housing? This argument is easy to present, because you can find so many familiar illustrations and it's so easy to draw analogies to other needs.

My fourth suggestion for improving the case is to go on the attack more often. A lot of the fallacies mentioned today are also found in the case for socialized medicine. They *also* exaggerate and omit and are inconsistent. Be on the lookout for such errors. And remember that he who advocates a change carries the main burden of proof. Challenge the opposition to prove that the needs for a change is *great* enough to warrant this drastic change. When they show the gaps in our present payment system, see if they can prove that a large percentage of our populace is unable to meet the costs in *some* way. Is the particular need they use as the basis for their case unsolvable by other means? By simply remembering that drastic change requires drastic need, you'll often put the opposition on the spot.

My final suggestion has to do with the entire approach to the problems of paying medical care. For many years, organized medicine has been associated with negativism; that charge is much less justifiable now, but there is still a need to be *for* something more often. I mentioned earlier the change in attitude to-

ward voluntary insurance that occurred when the public relations firm of Whittaker and Baxter took over the AMA campaign against Truman's health bills. They understood the need to say something besides "no" to almost all new proposals. Since then, the medical profession has stood on firmer ground. Supporting the Kerr-Mills bill instead of merely opposing the Forand bill, was the right kind of argumentation. In an address to the Life Insurance Medical Directors in October, 1959, Dr. Louis Orr struck the right note when he urged these men to push policies for those over 65 as the best way to avoid legislation like the Forand bill. More effort by physicians to encourage patients to select good insurance policies would help; you might even have the names of companies offering good plans available for the patient who seeks such information. The only really thorough plan would be one that paid *all* expenses above 6% of a man's income, or everything above \$25 in any one illness. There are plans that give coverage that are good—or better—but medical societies are often fighting them as socialistic when they should be pushing them as a better alternative than a national compulsory system.

How about time payments? That's always seemed to me a rather obvious solution for large bills. The American people are used to time payments for almost every large expense, what would happen to the person who doesn't pay his bill because it seems so large, if he could simply pay the bill as he pays for a refrigerator or new golf clubs? I know these are problems, but the dentists in Texas have a state-wide credit system, administered by a bank, which has worked very well for them. My dentist reported that his business had increased, his bad debts all but eliminated, and his relations with his patients greatly improved since he began suggesting this plan to any person with a bill over \$50.

Being positive means to put the emphasis on helping to solve problems, not on denying that they exist. And it means improving your image in the eyes of your patients; too many doctors have become so involved in their pursuit of the dollar that they've become impersonal and hurried, and all too often doctors have raised their fees for those who hold health insurance policies, thus defeating the very purpose of having the policy.

There's a lot more that could be said in evaluation of—and improvement of—the case against socialized medicine, if time permitted. But I hope you haven't been so busy resisting my ideas that you've missed my real purpose in giving this kind of talk. I *want* you people to win your fight against socialized medicine because I think we can solve the problems that still exist in paying for medical care without going to the extremes that less wealthy nations felt they had to adopt. But if we're to win the fight, we ought to be anxious to use the most effective weapons. In the face of informed opposition, some arguments that are emotionally strong prove to be logically weak. How-



ever, in such situations, there are other arguments that have logical validity. By using some of those I've mentioned—by taking a more positive approach—by demanding that the supporters of socialized medicine show a *drastic* need—and by avoiding some of the

errors of argumentation, I hope you'll be *better* able to present a case against socialized medicine. And then we'll both have done our share in saving our nation from what we both believe to be the wrong solution to the problem of paying the costs of medical care.



(Continued from Page 452)

psychological description of the basic psychodynamic problems encountered in a depressed patient as compared with an anxious patient.

This book makes easy reading and is an excellent book for all practitioners of medicine. It has the special quality of being able to awaken an interest in the underlying psychology of physical symptoms in general.

Norton Williams, M. D.

**NON-INFECTIVE DISEASE IN AFRICA.** H. C. Trowell, Williams and Wilkins Co. Baltimore, Maryland, Exclusive U. S. Agents, 481 pages, \$13.00.

This book cannot be recommended for the general reader. The author excludes infectious, parasitic, and surgical diseases from consideration and discusses by systems what is left over. He attempts to compare many entities as they exist in Africa with the general impression of parallel diseases in Western society. As such, a great deal of space is wasted in repeating descriptions of entities already amply described in

many text books. No condition is considered in great detail with the possible exception of some of the infantile hepatic diseases. Nowhere is there intense exploration of the reasons for the differences described between Western and African disease aside from generalizations about diet and parasitism. Except in obvious instances such as the sickling trait, there is no mention of genetics and its role in the emergence of variation in the response of a genetically separate group of people to disease. The treatment of conditions apparently indigenous to Africa, such as vascular diseases, idiopathic cardiomyopathy, various liver syndromes is not detailed enough. Psychic influences are seldom mentioned. Much space is wasted on obvious truisms. The major value of the book would appear to be for the relatively unsophisticated student who is actually on the scene in Africa or who is intending to go there. In addition to this, its bibliography would be of help to the student seeking more detailed information about the incidence and natural history of degenerative disease as it presents itself in Africa.

C. M. Smythe, M. D.

# **SOUTH CAROLINA MEDICAL ASSOCIATION MINUTES OF THE ONE HUNDRED AND THIRTEENTH ANNUAL SESSION OF THE HOUSE OF DELEGATES**

## **MINUTES CONTINUED HOUSE OF DELEGATES**

**Wednesday, April 26, 1961 — Charleston, S. C.  
Joseph P. Cain, Jr., M. D., Presiding**

**THE CHAIR:** The Credential Committee reports a quorum is present.

The first order of business today, we will take up the reports of the various reference committees. The first report will be the report of the committee to study the Reports of Council and Officers, Dr. Pierre F. LaBorde, Chairman, of Columbia, Dr. LaBorde.

**DR. PIERRE F. LaBORDE, JR.:** Your Reference Committee on Report of Council and Officers met and considered the following reports and submits recommendations thereon as follows:

### **Officers' Reports**

The report of the secretary was considered in its entirety and this committee commends the secretary for his effective work during the year and joins him in his recommendation that the State Association work for proper legislative implementation of the Kerr-Mills Bill and keep watchful vigilance on all proposed legislation, state and national, affecting physicians.

**THE CHAIR:** Dr. LaBorde, read your entire report and if you have any particular recommendation before the report is finished, you make the motion, as you go along whenever you want action taken by the House of Delegates.

**Dr. LaBorde (continuing report):** The report of the treasurer was reviewed and discrepancy between that presented and that published was discussed and corrected by the treasurer. With a very minor reprimand for minor derelictions in mathematics, we commend his conduct of his office and recommend acceptance of his audited report as published in the Journal.

The report of the editor of the Journal was reviewed. The committee individually and collectively were reminded how eternally we and our association are in his debt for the fine, inadequately assisted fashion in which he serves in this and multiple other capacities and recommended our thanks be conveyed and our hope that more tangible evidence of our gratitude may be forthcoming.

The further report of our editor, in his capacity as chairman of the committee on Public Relations, was reviewed and we commend the committee's efforts in these respects and recommend increasing utilization of the proposals and materials available through this committee.

The report of the President of the Woman's Auxiliary was reviewed and we commend the president and her membership for deeds well done and beg their continued valued valuable support.

The report of the executive secretary was reviewed and we commend the activity in the legislative field and recommend continued vigilance and would like to join our executive secretary in recommending to the membership attention to our exhibitors.

The reports of our delegates to the A.M.A. were reviewed and are commended. We hope our representatives, whoever they may be, will continue to promote our and other proper causes in high places. Particular note was taken of the recommendations presented from Dr. Johnson's A.M.A. committee reminding us that

positions may be filled in councils and committees by proposals from state and county societies. We recommend consideration of all our delegates' proposals by appropriate organizations at appropriate times.

### **Council Report**

The portion of the report of Council, referred to our committee was reviewed. We concur in Council's pride in our member, Julian Price, being Chairman of the A.M.A. Board of Trustees and agree to his fitness to hold its highest office. Council's approval of the proposed adoption law, we concur in although specific provisions were not available to the committee.

**Dr. Tom Parker's** report for Council, recommending subscriptions for council members to "Challenge to Socialism" by Dr. Marjorie Shearon with his commendation as to its being informative and authoritative, was reviewed and further elaborated on by Dr. Tom Goldsmith and the committee agree subscriptions for councilors and such other officers as council decides proper should be procured and we further recommend it to such societies and individuals as may elect, in view of its endorsement by our "heart and conscience of a conservative member."

Those portions of Council's report dealing with appropriations of money to benevolence committee, potential scholarship grants, analysis of salaries paid by the association, were reviewed and we commend Council on these efforts and recommend their continuance at the option of Council.

The motion presented from Council in reference to establishment of a First Aid Station in the State House, as proposed for study by the Columbia Medical Society, was discussed by the committee and with interested members. It was the unanimous opinion that no such study be undertaken. The potential good public relations, as was mentioned in the resolution, was noted but thought to be far outweighed by potential bad and other undesirable features. It is therefore the recommendation of this committee that no such study be undertaken.

This completed the report of the Reference Committee.

**THE CHAIR:** Thank you, Dr. LaBorde.

Motion was made that the report be accepted, seconded, not discussed, the vote was taken and unanimously passed.

**Dr. George Wilkinson, Sr.,** is now present. I wonder if he would like to give a short report of the work of the State Board of Medical Examiners at this time or if he has any comments? This is out of order but we are all interested in the State Board of Medical Examiners and I would like Dr. Wilkinson to have the floor for a few minutes at this time.

**DR. WILKINSON:** I have no report to make.

**THE CHAIR:** It is just as well that Dr. Wilkinson left yesterday, he says he doesn't have anything to say.

### **Legislation and Public Relations**

The next report will be the Reference Committee Report on Legislation and Public Relations, Dr. Ripon LaRoche, Chairman. I would like to ask Dr. LaRoche

whatever recommendations he has we will pause at the end of each one. We will not consider the report as a whole but will take it up individually. Dr. LaRoche, Camden.

DR. LaROCHE: Mr. Chairman and fellow delegates, the Legislation and Public Relations Reference Committee met in open and closed session, and presents the following recommendations:

(1) It is recommended the report of the Committee for Legislation and Public Policy, as submitted in the *Journal*, be accepted. I move the acceptance of this recommendation, Mr. President.

(This motion was seconded by Dr. Thomas R. Gaines, there was no discussion, the vote was unanimous and it was so ordered.)

(2) It is recommended further efforts be made toward establishment of a Medical Examiner—Coroner System in South Carolina. It is also felt a greater degree of public education toward this goal be instituted. I move the acceptance of this recommendation, Mr. President.

(This motion was seconded from the floor, the Chair called for discussion.)

THE CHAIR: Does the Chairman of that committee want to explain his recommendation that it be abolished? As I understand it, Dr. LaRoche, your recommendation is contrary to the recommendation of the committee?

DR. LaROCHE (Chairman) That is right, sir. (The vote was taken and passed and it was so ordered.)

(3) It is recommended by this committee that the present established system for obtaining certified copies of birth certificates be considered adequate and due to costs, difficulties and other measures any change might incur some further difficulty; it is felt, further, since the mother now certifies the present certificates, such copies are unnecessary as a means to avoid mistakes of information given on such certificates. Mr. President, I move the adoption of the recommendation of the committee.

(This motion was seconded from the floor, there was no discussion.)

THE CHAIR: The motion is that the present birth certificate system be continued with no change. (The vote was taken and unanimously passed and it was so ordered.)

### Reregistration

(4) The last resolution discussed was the resolution presented by the Aiken County Medical Society entitled Medical Practice Act of South Carolina, as amended (and further amended)—contains no threat to the privilege of *Licensure*. Further, it does not give the Board of Medical Examiners any additional powers or authority, not already delegated to it, to revoke a license.

*Licensure* is automatic with payment of the authorized fee.

Your committee feels favorably inclined toward this bill. However, it also feels many delegates have been instructed to oppose a re-registration act as originally presented and passed by the House of Delegates, due to certain provisions both contained or omitted; therefore, the Committee deems it to be wise that the present resolution, as proposed, be submitted to the membership units of the South Carolina Medical Association for a referendum or reconsideration should the action of this assembled body be unfavorable. The Committee, therefore, recommends the adoption of the Aiken County resolution and that recommendation failing we recommend the referendum.

THE CHAIR: The motion is that the resolution as presented yesterday morning by Dr. George A. Poda, of Aiken, be accepted by this assembly. He has moved its adoption, is there a second?

(This motion was seconded by Dr. Poda)

Is there any discussion on the motion? Now, gentle-

men, I am going to pause a minute, I don't know whether the Chairman moves to railroad it through or not, this is re-registration, as you know, and I certainly don't want us to pass something now and next week be on our toes to get it off. Does everybody know what they are voting on? Are you ready to proceed?

DR. J. P. BOOKER: Mr. Chairman, is it proper for this resolution to take precedence over a resolution that has already passed and is being held in abeyance until this meeting?

THE CHAIR: That is the prerogative of the committee. The other resolution was sent to the committee. Apparently they have disposed of it and favor this other.

DR. LaROCHE: No, we did not have the other resolution, I think we all understood that.

THE CHAIR: In other words the subject of re-registration was referred to your committee and this is your report on re-registration?

DR. LaROCHE: That is correct.

THE CHAIR: What about the resolution from Anderson County that the re-registration resolution be tabled?

DR. LaROCHE: The Anderson County Medical Society resolution was discussed very briefly and nothing was done about it.

THE CHAIR: Well, the fact is you can't bring in but one resolution for it and also recommend one against it, so you have brought in one for it. Apparently the Anderson County resolution was not acceptable.

DR. LaROCHE: That is correct.

(From the floor) Mr. President, in his resolution he refers to a referendum. If it is the consensus of this committee that this resolution be adopted by the House of Delegates—then what provision is being made for a referendum of the state Medical Association?

THE CHAIR: As I understand his recommendation it is this, that if this motion fails he recommended that it be referred to the counties, is that correct, Dr. LaRoche?

DR. LaROCHE: That is correct, yes, sir.

THE CHAIR: In other words, he is one jump ahead of the House of Delegates. If you pass it, then you have got it. If you don't pass it, then his committee requests a referendum. That is the resolution, is it not?

DR. LaROCHE: Might I explain, this meeting of ours lasted almost three hours, last night. We had the pros and cons, the discussion for this and after the discussion we felt the balance of power was very little on either side. After thinking about this considerably we felt that enough men in our state of the medical profession do not even realize what this act is, they have had no chance to see it, and we felt that if this bill could be passed by the house it was a good bill. However, we felt if it was unfavorable we still think it might be turned back to the individual county societies for a full referendum vote and get the will of the entire S. C. Medical Association.

THE CHAIR: In other words, if the bill passes then you recommend the referendum, anyway?

DR. LaROCHE: No, sir.

THE CHAIR: Is there any further discussion?

DR. BOOKER: I make a motion that this resolution be tabled.

THE CHAIR: Motion has been made that the resolution be tabled.

DR. GAINES: I second the motion.

(There followed considerable discussion of the nature of the resolution and the method of voting.)

THE CHAIR: The vote to table has carried 51 to 43. (A tabulation of the vote appears in the original minutes.)

I would like to go ahead with the rest of the report



on Legislation and Public Relations at which time we will entertain any motion for or against re-registration. Dr. LaRoche, will you continue your report, please.

DR. LaROCHE: I would like to make another motion. I would like to move that this amended resolution of Aiken County, as amended, be referred to the County Medical Units of the S. C. Medical Association for a referendum vote.

(This motion was seconded from the floor by Dr. Atwill.)

DR. GOLDSMITH (Recognized): Is he making that motion as an individual or as a member of the Committee on which he serves?

DR. LaROCHE: As an individual.

THE CHAIR: If it is made individually it is out of Order.

DR. LaROCHE: Excuse me, please, I am making this as a recommendation of the Reference Committee.

DR. GOLDSMITH: The Reference Committee does not have the prerogative to bring in anything except a rejection or a reception of a resolution. So that is out.

THE CHAIR: I would differ with that, I think the Resolution Committee can arrive at any compromise that they think might be acceptable, that is the reason for their work. However, I would like to call for a vote on this to get it clarified. If anyone objects to my ruling I would be glad to call for a vote from the house to either sustain or reject it. I would like to get this thing cleared one way or another, and the motion has been made and seconded that this be sent to referendum. If you don't want to do it, let's vote it down and clear the slate, if you want it let's do it. Is there any discussion on that motion? If not all in favor say "aye" (Many ayes) All opposed "no". (Many noes) We are right back where we started.

Doctor on the Floor (Recognized): To save time, if Dr. LaRoche will accept a substitute motion. I understand he voted against tabling the motion, therefore his motion might not have passed because of that, I voted for tabling the motion, wouldn't that put me in the position of putting in a substitute motion if Dr. LaRoche would accept it?

THE CHAIR: Dr. LaRoche's substitute motion was accepted.

(The Doctor) I was thinking we were voting if we were sustaining you in your motion for an order?

THE CHAIR (Laughing): Thank you for that vote of confidence. I was not going to put that to the House. Dr. Goldsmith was not pressing the point. What is the opinion of the House?

DR. EADDY: We respect your ruling. I withdraw mine. What was it on?

THE CHAIR: The vote was on the motion, in other words, the vote is that this amendment be sent to the various County Societies. Now, that, of course, is contingent on any action which you may take after this substitute if you consider any other form of re-registration for which the floor will be open right now. Is there any other motion concerning re-registration or the reconsideration of re-registration?

DR. WILSON (Interrupting The Chair): Pardon me, but you have not ruled on the vote of Dr. LaRoche's motion?

THE CHAIR: Yes, I have, I ruled it was carried.

DR. GOLDSMITH (Recognized): A good many are in favor of re-registration and a good many are opposed to re-registration. I would like to make a motion that Council, itself, study the matter and bring in an entirely different or a properly drawn up document to be presented at the next year's meeting and at the same time to be presented to the various county societies before that. (Seconded from the floor)

THE CHAIR: You have heard Dr. Goldsmith's motion.

I call your attention to the fact that you have already just said the Aiken County resolution would be sent to the County Societies for approval or rejection. Do you mean that that should take precedence over the other, do you reconsider the other vote?

Gentlemen, you have heard Dr. Goldsmith's motion that council consider and bring in recommendations next year as part of the plan on re-registration and before it is brought in to present it to the counties, is that correct, Dr. Goldsmith?

THE CHAIR: And that that report shall be in addition to the Aiken County Report which has already been passed by this house today subject to County referendum, is that correct? Is there a second to that motion?

(The motion was seconded.) Is there any discussion?

DR. DUNCAN recognized: Dr. Cain, I am speaking as an individual and not for my county, but it seems to me we are just making and passing a lot of motions and not accomplishing anything. I would like to hear just a little discussion as to why some people object to re-registration. We have had this very problem in our time before, a physician came into the county and there was no way of finding out if he was registered or not except that we write to the State Examiner. We did not have any ready reference. I am licensed in Georgia also and in Georgia they require re-registration every year. It is no trouble at all, they mail us a statement at the end of the year, we sign it and mail it back and they send us at the first of the year a complete listing of every physician in Georgia, where he is practicing, what type practice he does and everything. I don't understand the reason for objecting to re-registration. It seems to me we are wasting a lot of wind just saying "yes" or "no". If there is any reason not to register a good many would like to hear one reason for not re-registering. There is nothing that says it affects your license, it is not relicensing, it just tells where you are, what your type practice is and if you move out of the state where you are located. It is strictly for our own information, no one else has anything to do with it. I don't understand the objection. If anyone objects to this and has any particular reason, then I would like to hear from him.

THE CHAIR: Before we get into a huddle of "yes" and "no" we will have to have a different motion on the floor because we are not discussing the motion on the floor, the motion is Council study this and bring in a plan next year and before they bring it in it will be submitted to the counties, along with the Aiken plan which will also be submitted to the counties. Now, that is the motion, we are going to dispose of that motion, then if anyone wants another motion and discuss it, we will then discuss it until dinner time.

All in favor of Dr. Goldsmith's motion say "aye". (A good many "ayes") All opposed "no". (There was a preponderance of the Noes.)

Dr. Goldsmith's motion fails.

THE CHAIR: Gentlemen, are you through with re-registration, as of now, until the report comes in next year whereby the motion to consider the Aiken County Resolution, if any County Society endorses it. There is no mandate to the House of Delegates to consider it, the only mandate is that it be sent to the County Societies for referendum. Next year Charlie Wyatt can argue with you.

I hereby declare that re-registration is over for this year.

### Public and Industrial Health

THE CHAIR: I will now call for the report of the Reference Committee on Public and Industrial Health, Dr. P. K. Switzer, Jr., Chairman, Union. Dr. Switzer. DR. P. K. SWITZER: (Reading) Mr. President, The Reference Committee on Public and Industrial Health met and considered the following reports and resolutions:

(1) The report of the Medical Advisory Committee to Crippled Children, the reference committee recommends that this report be received and adopted by the House of Delegates, and I so move. (This was seconded, the vote taken and the motion carried.)

(2) The report of the Committee on Rural Health, the reference committee received that report as information and moved that the report be adopted and I so move. (This was seconded, there was no discussion, the vote taken and the motion was adopted.)

(3) The report of the Committee on Industrial Medicine—the reference committee received that report as information and moves the committee report be adopted by the House of Delegates. I so move, Mr. President. (This was seconded)

THE CHAIR: Any discussion?

DR. JOHNSON: What is it about?

DR. SWITZER: It is printed in the brochure there, Dr. Johnson.

THE CHAIR: All of these reports have been printed.

DR. JOHNSON: Is the adoption anything we have to do or do we receive it as information?

DR. SWITZER: We receive it as information and adopt their recommendation.

(The vote was taken and passed.)

### Care of The Aging

(4) The Committee Report on Care of the Aging—the reference committee approves the report as read with the exception of Section 4, which recommended "that the council contact Drs. Peeples and McDaniels." We move to have that stricken out and substitute "that the council contact the Executive Committee of the State Board of Health requesting them to implement the program as recommended." I so move, Mr. President. That simply eliminated the names of "Drs. Peeples and McDaniels" who say that the executive committee would have to act on that. (The motion was seconded)

THE CHAIR: What was the program they wished?

DR. SWITZER: The Pilot Program for home nursing care, which they wished to implement and speed up, with the hope that such a program can be established in every county in the State.

THE CHAIR: The motion has been made and seconded, is there any discussion? (There was none, the vote was taken and it was carried.)

(5) The Report of the Executive Committee of the State Board of Health—the reference committee received this report and moved that it be adopted by the House of Delegates. I so move, Mr. President. (This was seconded, there was no discussion, the vote was taken and passed and the report adopted.)

(6) The reference committee concurs in the resolution of the Public Health Committee and recommends that the committee be dissolved. I so move, Mr. President. In view of the fact that the Public Health Committee apparently overlaps the report of the Executive Committee of the State Board of Health, they have recommended that they be dissolved and not function anymore and we concur in that recommendation and so move, Mr. President.

(This motion was seconded)

THE CHAIR: Gentlemen, the motion is Committee on Public Health asks that it be abolished; the reference committee reports favorably and so moves. All those in favor say "aye".

DR. ROBERT WILSON (interrupting) Mr. President, that is one of the Standing Committees of the House in the By-Laws and I think that would have to be taken up by an amendment to the By-Laws, rather than in this manner.

THE CHAIR: That is a Standing Committee of the House?

DR. SWITZER: This same report has been carried for two or three years that this be abolished, and that is the only report they have ever made.

THE CHAIR: Just a moment and we will get a parliamentary ruling, to see if the committee can be abolished. (Mr. M. L. Meadors, Executive Secretary, is called for a ruling.)

THE CHAIR: Mr. Meadors, a resolution by the Committee on Public and Industrial Health referring to a report on the Committee of Public Health, which recommended that its own committee be abolished, since it overlaps the Executive Committee of the



*"Doctor, lately I've noticed that I tend to put on weight and feel anemic and have increased susceptibility to infection and have an accumulation of fluid under the skin that resembles an edema-like state and see also page 714, cretinism, tend to lose hair and have dry skin and a lowered rate of body heat production and . . ."*

Board of Health, however, that is a Standing Committee in our By-Laws. Dr. Wilson raises the point of order as to whether or not it can be abolished by vote. I do not believe that you have to have any special order, it is a question of voting "yes" or "no". MR. MEADORS: It would simply be an amendment to the By-Laws which would take a two-thirds vote. It can be voted on.

THE CHAIR: The recommendation can be voted on. THE CHAIR: All right, gentlemen, we can vote on this motion but it will take a two-thirds vote of those present to carry it since it is an amendment to the By-Laws. We will now vote to amend the By-Laws by removing the Committee on Public Health from the By-Laws. All in favor, please stand up. All opposed, please stand up.

The necessary two-thirds having voted, I declare the By-Laws amended to remove the Committee on Public Health.

(7) The report of the Civil Defense Committee—the reference committee wishes to congratulate the Richland County Medical Society on its efforts for emergency medical services and recommends that other counties take similar action.

This is not made in the form of a resolution but was simply a small copy of what the Richland County Delegation or the Richland County Medical Society has done in an effort to prepare for emergency action.



We accept it as information and wish to congratulate them on their efforts.

(8) With reference to the resolution proposed by Dr. George D. Johnson with reference to automobile accidents, this committee concurs and moves that the resolution be adopted by the House of Delegates. I so move, Mr. President. (Motion was seconded.)

THE CHAIR: Does that have to do with cooperating with the Cornell Board on Accidents?

DR. SWITZER: No, this had to do with sending memorandums to the Chairman, State Highway Commission, and to the State Legislative Commission urging them to take appropriate action and make legislation to urge magistrates to impose stiffer fines and to be more stringent in enforcing our laws in an effort to do away with drunken driving. It was the resolution submitted by Dr. Johnson yesterday.

(There was no discussion on the motion, the vote was taken, passed and it was so ordered.)

DR. SWITZER: I move that the report be accepted as a whole, Mr. President.

(This was seconded, there was no discussion, the vote was taken and passed. It was so ordered.)

THE CHAIR: The next report will be the Reference Committee to Amendments to Constitution and By-Laws, Dr. Frank Owens, Chairman, Columbia.

DR. FRANK OWENS: This committee has several amendments that they considered and I presume that the same ruling would apply to these that applied to the other a few minutes ago, because they are all amendments to the By-Laws.

First let me say the published Constitution and By-Laws are dated 1957 and since then there have been two or three amendments and the numbers are "A" or "B" or "1" and "2" or something like that, and may not exactly fit in, but the intent of our recommendation is that the proper numbers be placed in front of the proper paragraphs.

### **Committee on Scientific Program**

(1) The first is the Committee on Scientific Program shall consist of three (3) members together with the president and secretary, ex officio. The said three members shall be appointed by the President initially, one for a term of one year; one for a term of two years and one for a term of three years. All terms following the initial term shall be three years. The committee shall determine the character and scope of the scientific program of the general sessions of the Association and select the speakers subject to the instructions of the House of Delegates or Council. Thirty days prior to each Annual Session, it shall prepare and issue the official program of the meeting.

The change from the old one over this is that the former rule did not specify as to who appointed the committee on the program nor did it specify any particular length of time. The result is that perhaps a man serves one year or he might serve ten years, so this specifies the time.

(motion) Your reference committee recommends the adoption of this and I so move. (This was seconded by several)

THE CHAIR: Gentlemen, this is an amendment to the By-Laws which requires two-thirds vote, and you will vote by standing, please. All in favor please rise. All opposed, please rise. (It was unanimous) The vote is carried by the necessary majority.

DR. OWENS: The next:

Amend Chapter VIII, Section 3 of the By-Laws by adding at the end of the list of committees therein, another committee to be designated as follows:

### **Committee on Emergency Medical Care**

Amend Further By Adding In Chapter VIII a new section, immediately after Section 11, to be numbered Section 12 and by renumbering the remaining sections of said chapter to conform, the new Section 12 to provide as follows:

The Committee on Emergency Medical Care shall consist of five (5) members nominated by Council and elected by the House of Delegates. Initially, one of such members shall be nominated and elected for a term of one year, one for a term of two years, one for a term of three years, one for a term of four years and one for a term of five years. The terms of all members of the committee following the initial terms shall be five years. The committee shall organize at the first meeting by the election of a chairman and a secretary and such officers shall be chosen by the committee annually.

The committee shall be charged with the responsibility for study, planning, and advising the Association with respect to the medical phases of civilian defense and disaster medical care preparedness, and to act as a liaison between the medical profession of South Carolina and the Director of Civil Defense.

This is a new section and does not substitute any other section. The Committee recommends approval and I so move. (This was seconded from the floor).

THE CHAIR: This amendment required a two-thirds majority and that number voting for it I declare the amendment adopted.

DR. OWENS: Next:

Amend Chapter VIII, Section 3, of the By-Laws by adding at the end of the list of Standing Committees another to be designated as follows:

### **Committee on A. M. E. F.**

(11) Committee on American Medical Education Foundation.

Amend the said Chapter further by adding another Section immediately after Section 13, to be numbered Section 14, and by renumbering the sections of said chapter to conform. Said section to read as follows:

"The Committee on American Medical Education Foundation shall consist of five (5) members, three (3) to be appointed by the President of the Association, the President and Treasurer of the Association, ex officio. The three (3) members to be appointed shall serve initially one (1) for one (1) year, one for two (2) years and one for three (3) years, as designated by the Chairman of Council. The terms of all members thereafter appointed shall be three (3) years. It shall be the duty of this Committee to supervise the conduct of all publicity and fund raising for A. M. E. F., to receive the reports from A. M. E. F. together with the remittance of such funds as may be allocated for the Medical College of South Carolina, to transmit the same to the Dean of the School of Medicine, Medical College, and to receive from him reports and information concerning the application of the funds so received. The Committee shall act in all respects as the connecting link between the Association, the American Medical Education Foundation and the Medical College of South Carolina. Its chairman shall be elected annually by the committee."

There was one question brought up in discussion before our committee and that was if a doctor wanted to designate the \$10 that he sends in to be used at some other school could he do so and does this affect it anyway. It does not affect it in any way. If you do not designate it be used somewhere else it will automatically be used by the Medical College of South Carolina.

Your committee recommends the adoption of this resolution. (This was seconded) The Amendment was adopted.

### **Committee on Welfare and Rehabilitation**

DR. OWENS: The next and final recommendation has to do with the Committee on Welfare and Rehabilitation. There is at present a committee set up on Welfare and Rehabilitation and it was felt by some that it would be better to be separated and made two committees, as a former section of our By-Laws put both together two motions are necessary. One is to take



the Welfare out of the "Welfare and Rehabilitation" and the other setting up the "Welfare Committee". So, I will read you the old one first, and show the changes there, and then go to the recommendations.

Amend Chapter VIII, Section 3, by adding at the end of the list of committees there stated, the following:

It now reads:

(9) "Committee on Welfare and Rehabilitation" strike out the words 'Welfare and' so that it will read "Committee on Rehabilitation."

The Committee on Rehabilitation shall consist of five (5) members appointed by the President of the Association. Initially the terms of office for one year, two, three, four and five years, respectively, as designated by the President at the time of appointment, so that the term of office of one member of the Committee shall expire each year. The terms of all members of the Committee following these initial terms shall be five years each. Yearly regular vacancies occurring by the expiration of a member's term, and vacancies occurring by resignation or otherwise shall be filled through appointment of the President. The Chairman of the Committee shall be elected by its members annually.

This Committee shall have the responsibility of advising and maintaining liaison with the several agencies in the field of rehabilitation. The Committee shall keep the Association cognizant of the needs and accomplishments in this area of responsibility through annual reports and interim reports when necessary or desirable.

THE CHAIR: We will vote on them individually, but I wish you would read them the other one, then we will have the whole before us.

DR. OWENS: I will read the second one, then we will submit the first one for your approval or rejection. The second one is:

Amend Chapter 8, Section 3, of the By-Laws by adding at the end of the list therein another committee to be designated as follows:

(10) Advisory Committee to the Department of Public Welfare.

Amend further by adding in Chapter 8 a new section immediately after Section 12 to be numbered Section 13 and by renumbering the Sections of said Chapter to conform. The new Section 13 to read as follows:

### **Advisory Committee to The Department of Public Welfare**

The Advisory Committee to the Department of Public Welfare shall consist of nine (9) members, one from each medical district to be appointed by the President. Initially, three of such members shall be appointed for a term of one (1) year; three (3) for a term of two (2) years; and three (3) for a term of three (3) years. The terms of all members of the Committee following the initial terms shall be three (3) years. It shall be the duty of this Committee to consider, when requested, any matters concerning the practice of members of the Association involving patients under or programs of the Department of Public Welfare and to attend as a liaison between the Department and the Association.

The members of the Committee shall not be eligible to succeed themselves.

DR. OWENS: Your Committee recommends the approval of both of these and I move the approval of the first one I read at this time. (This motion was seconded)

THE CHAIR: Gentlemen, you have heard the motion. (The vote was unanimously in favor.) It is so ordered.

DR. OWENS: Now, your committee recommends the acceptance of the second recommendation, the new section, and I move its adoption. (The motion was seconded)

THE CHAIR: (Vote was unanimous) I declare both of them passed.

THE CHAIR: Thank you, Dr. Owens and your committee.

Now, before we go into the next order of business, I would like to call your attention to an item in the program, on Page 5, please turn to Page 5. One of the problems we have had during the years is to have a good representation at our opening sessions on Thursday mornings of our conventions. We have a good meeting on Wednesday, we have a lot of people in town on Thursday, but they are in various states of confusion and despair early Thursday morning and very often they sleep so late that they can not get breakfast and get to the meeting so that we have been embarrassed on several occasions by having our speakers, who have come from a distance, speak to ten or fifteen people which is not good for us or for them, either. So, realizing that problem the Alumni Association offered as part of their services to us, to put on a breakfast for members of the Alumni Association tomorrow morning at 8:30. The reason I am calling your attention to this is the fact that Joan says she has only sold eight tickets and they are only \$1 a piece, you will get breakfast for only \$1, the Alumni Association is going to pay the other 50 cents. Please pick up your tickets and pass the word around that we are trying to have the doctors together so that the meeting can be started on time. Now, since I am not a visiting dignitary and I don't care whether two or three of you are there, or a lot, (you know I would like to have a lot of you there!) so as soon as breakfast is over I am going to give my annual report, trying to gain a little time for our speakers on the Scientific Program. However, I would consider it a great compliment if you would get up at 8:30 and have breakfast and after breakfast I will give my report. Dr. Mobley, Chairman of the Memorial Committee, will also give his report, but the urgency of the situation requires that we get the tickets so they will know how many people to prepare for. I would like for you to come, if you can, and if you can't, come as soon after breakfast as you can.

THE CHAIR: The next report is that of the reference Committee on Insurance, Blue Cross and Blue Shield, Dr. John A. Siegling, Chairman, Charleston. Dr. Siegling.

DR. JOHN A. SIEGLING: Mr. President, the Committee on Insurance, Blue Cross and Blue Shield, Doctors G. D. Johnson, William Hunter, Wyman King and John Siegling considered the problems referred to their committee, and wish to report as follows:

### **Insurance**

(1) We wish to commend the Insurance Committee, consisting of Doctors A. C. Bozard, J. D. Gilland and Kenneth Lawrence, Chairman. It is obvious that they have given a great deal of time and thought to their report and the affairs of the Committee throughout the year. In line with its recommendations, we

(a) recommend that the South Carolina Medical Association continue to encourage the work of an active Insurance Committee. I so move. (This was seconded, there was no discussion, the vote was taken and it was so ordered.)

(b) recommend approval of the Group Life Insurance for members of the Association offered by Messrs. J. B. Talbert and O. E. Stubblefield, and underwritten by the Home Security Life Insurance Company. I so move.

(This was seconded, there was no discussion, the vote was taken and motion carried.)

(c) disapprove a plan of major hospital expense coverage offered by the Commercial Insurance Company of New Jersey represented by the General Agency, Mr. John B. Cappelmann, Jr., of Charleston, since our own South Carolina Medical Care Plan will offer a similar plan in the near future, and since we have a program of liability coverage with the Educators

Mutual which is working satisfactorily. I so move. (This was seconded.) The committee moves disapproval of a plan of major hospital expense coverage offered by a commercial insurance company, as that plan required going into a life insurance feature which we feel is already covered.

The motion was carried.

DR. SIEGLING:

(d) We move approval of the Retirement Plan offered by Mr. William Webber of Washington, D. C., through the Minnesota Mutual Life Insurance Company. I so move. (This was seconded, the vote was taken, and carried.)

2. We move that the Industrial Fee Schedule Committee report as rendered by Dr. W. W. Edwards, Chairman, be accepted and that the *Journal* carry a notice when the Fee Schedule is finally accepted by the Industrial Commission. I so move.

(This was seconded.)

THE CHAIR: Is there any discussion?

DR. N. O. EADDY (Recognized): I would like to ask that when the fee approval is published that the Schedule, itself, be published. It was published quite a while back, most of us don't have it and don't know what the changes will be. It is not only notice of the fact that this schedule has been approved, with which we are concerned, if you will leave it up to Dr. Waring and it meets with his approval, I would make the suggestion that the new fee schedule, itself, be published in the *Journal*.

THE CHAIR: Is that an amendment to Dr. Siegling's motion?

DR. EADDY: No, I just offered it as a suggestion.

THE CHAIR: Is there any further discussion? Your suggestion is not going to pass, Dr. Eaddy, if you don't make a motion out of it.

DR. EADDY: All right.

THE CHAIR: All in favor of Dr. Siegling's motion when the fee schedule is adopted by the Industrial Commission that a notice be put in the *Journal*, signify by saying "aye" opposed—"no". It is so ordered.

DR. JOHN SIEGLING:

3. We commend the Directors of the Benevolence Fund and hope that it will continue to grow. We move acceptance of the report as printed. (This was seconded, there was no discussion, the vote was taken and the motion was carried.)

4. We recommend acceptance of the report of the Committee on Care of the Patient, as printed. I so move. (This was seconded, there was no discussion, the vote was taken and it was so ordered.)

5. Finally we would like to acknowledge the debt of the Association to Dr. Frank Owens, Chairman of the Medical Advisory Committee on Selective Service, who has for so long kept us informed, and recommend acceptance of his report as given before the House of Delegates. I so move. (Seconded, there was no discussion, the vote was taken and motion carried.)

DR. SIEGLING: Mr. President, I now move acceptance of this report as a whole. (Motion seconded, it was voted on and carried.)

THE CHAIR: Thank you, Dr. Siegling.

The next reference committee is that on Miscellaneous Business, Dr. Robert Clarke, Chairman, Due West, Dr. Clarke.

DR. ROBERT CLARKE: Mr. President, The following reports and resolutions were considered by your reference committee. Three of these have already been considered by other reference committees, and I will omit those which have already been covered.

DR. CLARKE:

### Accident Prevention

1. Report and recommendations of the S. C. Medical Association's Accident Prevention Committee—the reference committee recommends that this committee be commended for its report and that the report be

accepted with the following exception. That that part of the report referring to lead missiles in air rifles, pellet guns, etc., be referred to an appropriate committee for the purpose of study and presentation to the state legislature. I so move. (Motion was seconded the vote was taken and unanimously passed.)

Further, it is recommended that the State Association actively cooperate with the Cornell University Crash Injury Research Unit. I so move, Mr. President.

(Motion was seconded, vote taken, and the motion was carried.)

### Historical Medicine

2. Report on Historical Medicine, the reference committee recommends that the customary \$500.00 be allocated to the work of this committee. I so move, Mr. President. (Seconded, voted on and the motion was carried.)

3. The resolution from the Executive Committee of the Spartanburg Medical Society, relating to appealing to the American Medical Association for initiation of an active and vigorous pro-physician propaganda program was approved by the reference committee in principle, however, it is recommended that this resolution be referred for further study to a proper committee having more knowledge of the current efforts and facilities of the American Medical Association along public relation lines, as your reference committee feels it is not well enough informed as to the present A. M. A. program. I so move. (Seconded, no discussion, vote taken and the motion was carried.)

### Social Security Poll

4. The request by the Greenwood County Medical Society that the members of the S. C. Medical Association be polled as to their present wishes in regard to the social security system was considered and your reference committee recommends that during the coming year this poll be taken. I so move, Mr. President. (The motion was seconded, there was no discussion, the vote was taken and the motion was carried.)

5. Report of the A. M. E. F. Committee for 1960—your reference committee recommends that this report be adopted. I so move, Mr. President. (This motion was seconded, there was no discussion, the vote was taken and it was so ordered.)

6. Advisory Council to the Woman's Auxiliary—your reference committee recommends that the report of this committee, as published in the *Journal*, be adopted. I do move, Mr. President. (This motion was seconded, there was no discussion, the vote was taken and the motion was carried.)

7. Report of Committee on the Scientific Program—no report was received from the Scientific Program Committee.

8. Report of Committee on Liaison with Allied Professions—your reference committee approves the report of the Committee on Liaison with Allied Professions and moves that its recommendations, as printed in the *Journal*, be adopted. I so move, Mr. President. (This was seconded, the vote was taken and the motion was carried.)

Mr. President, this concludes our report and I move that the whole report of the reference committee on Miscellaneous Business be approved. (This was seconded, voted on and accepted.)

Gentlemen, this concludes the work of the reference committees and I want to thank the Chairman and members of these committees for the hard work and when I say "hard" I mean hard. I stopped in on two or three of those committees yesterday afternoon and those boys were sweating it out. You fellows were probably there helping some of them sweat, but we all owe them a debt of gratitude because it is only in committees that we can get these things thrashed out. If we had to take up all of this on the floor of the House, we never would get through. I would like to



ask for a rising vote of thanks for all members of the reference committees. (The convention rises and applauds.)

### Elections

THE CHAIR: Gentlemen, we go into the order for election of officers. Nominations are now in order for the office of President-Elect, of the South Carolina Medical Association.

DR. W. O. WHETSELL, Orangeburg (Recognized by the Chair):

Mr. President, the Edisto Medical Society proposes Dr. J. H. Gressette as President-Elect of the South Carolina Medical Association. Dr. Gressette is a native of St. Matthews, a 1938 graduate of the South Carolina Medical College, a diplomate of the Board of Otolaryngology and Ophthalmology and a member of the American College of Surgeons. He has been practicing in Orangeburg since 1945, a member and past president of the Edisto Medical Society and the South Carolina Society of Ophthalmology and Otolaryngology. He has been a member of the Council for the past nine years and is at present the Chairman of the Council. As a delegate from the Edisto Medical Society I should like to nominate Dr. Gressette.

DR. GAINES, Anderson, (Recognized by The Chair):

As a member of the S. C. Society of Ophthalmology and Otolaryngology I should like to say a word about Dr. Gressette. When he finished his residency and came back to South Carolina, those of us who were here already in that specialty soon felt the impact of his coming. In the past years we have learned to respect his integrity, his learning in his profession and it has increased during the years. As one, who is fairly familiar with the naturopathy question and the question of optometry, as related to the South Carolina medical profession, I should like to take this opportunity to pay my respect to his level-headedness and his good judgment in such affairs, also to his entry into the law making body of South Carolina. I should think that our Association would be in good hands with his leadership and I take great pleasure in seconding his nomination.

THE CHAIR: Does anybody else want to second?

DR. L. P. THACKSTON, Orangeburg: Gentlemen, I take a great deal of pleasure in saying a few words about a man that I know doesn't need anyone to bring out his good qualities, I am sure. Dr. Gressette is an excellent professional man. I am speaking of him from a different angle. He is an excellent medical man and he will carry the colors for us up or down, in or out, and he can be absolutely depended upon, whether the going is nice or whether the going is rough. He will make no effort to ramrod a proposition or a resolution or a nomination through this organization. I would like to take the liberty of making a motion that the nominations be closed.

THE CHAIR: Dr. Thackston, I will rule that motion out of order because I want to give plenty of opportunity to have somebody nominated here, and if nobody else wants to nominate anybody we will close it right quick, but Dr. Poda wants the floor. Dr. Poda recognized.

DR. PODA: After all the hell we have raised about re-registration I don't know if Aiken County would be quite welcome on the floor. We and the delegates from Aiken County have unanimously told that if Dr. Gressette was to be presented the society as a whole wishes to say they would very, very much like to see him as president-elect. Those of us who have had contact with him have found him to be a most commendable citizen as well as a doctor. We think he would do the Association a terrific job and would like to add our second to those already on the floor.

THE CHAIR: Are there any other nominations?

DR. WILSON: I would like to move, Mr. Chairman, that the nominations be closed and Dr. Gressette be

elected by acclamation. (This motion was seconded.) THE CHAIR: Dr. Wilson moved that the secretary be instructed to cast a unanimous ballot of the Association to elect Dr. J. H. Gressette president-elect of the S. C. Medical Association. (The vote was taken and the motion carried.)



*The new President and the President-elect.  
Dr. Gressette, President-elect; Dr. Wyatt, president.*

Gentlemen, the floor is open for nominations for vice-president. We may have a slight delay if our president-elect comes in the door, but while we are waiting for Dr. Gressette we will go on.

DR. NORMAN EADDY (Sumter): I would like to nominate as vice-president of this Association Dr. Wallis D. Cone, of Sumter.

THE CHAIR: Dr. Cone has been nominated as vice-president. Here comes our president-elect, gentlemen, let's all rise. (House rises and applauds until Dr. Gressette reaches the podium)

THE CHAIR: Truly this is a great surprise.

DR. GRESSETTE: Should I be surprised? Thank you very much, we will do the best we can. Hope we don't step on your toes, but we will be doing what we think is the best for the Association and I hope that I will live long enough to follow Charlie Wyatt.

THE CHAIR: Gentlemen, Dr. Wallis Cone, of Sumter, has been nominated for vice-president. If there are no further nominations do I hear a motion that the nominations be closed and that Dr. Cone be unanimously elected?

(Motion made by Dr. Thackston, seconded by Dr. Eaddy, the vote was taken and it was so ordered.)

DR. EADDY: I would like to point out that both of these boys are from Orangeburg or thereabout, and we will be in pretty good hands.

THE CHAIR: You should have pointed that out beforehand.

DR. EADDY: We should have known that beforehand.

THE CHAIR: Nominations are in order for Secretary.

DR. CHARLES WYATT: Mr. Chairman, I nominate the present incumbent. (This was seconded by several.)

Dr. Robert Wilson was re-elected.

THE CHAIR: The office of treasurer, this nomination comes from the Council and the present Chairman of Council, who is still Chairman, will please make the nomination.

DR. GRESSETTE: Mr. President, Council looked all over the entire membership and we found that to nominate anyone other than Howard Stokes that we would come up wanting, so, Council recommends and



nominates Howard Stokes for Treasurer of the South Carolina Medical Association at this same time.

Dr. Howard Stokes was elected treasurer.

THE CHAIR: The next is the Delegate to the A.M.A., Dr. William Weston, Jr.; his term expires December 31, 1961.

DR. FRANK OWENS (Recognized): Mr. President and members of the House of Delegates, there are many men in here who could make fine delegates to the American Medical Association to represent our South Carolina Association. There are two in particular, though, who have some assets that perhaps the others do not have. One of them is George D. Johnson, who has been up there for several years and is making us a wonderful representative. The other man is a man who is very firm in his convictions, who is very forceful in his presentation of his views and the views of the South Carolina Medical Association, a man who has worked his way up, you might say in the medical world, he was President of the Columbia Medical Society one time, President of the S. C. Medical Association, has been representing us for the last nine years in our national body. It is quite an advantage when you have had an opportunity to meet all these doctors over the country who are delegates to the A.M.A. There are things that come up in which friendship is worth a great deal. You can put views before a group but you can accomplish a great deal by talking to them in rooms and corridors and things of that kind, so I have the pleasure and honor of placing in nomination, to succeed himself as delegate to the American Medical Association from South Carolina, Dr. William Weston, Jr. (Second)

THE CHAIR: Are there any further nominations?

DR. P. F. LaBORDE, Jr. (Columbia: I would like to nominate Dr. Joe Cain.

DR. CAIN (THE CHAIR): You put me on the spot. I am going to turn the chair over to Dr. Workman. I assure you this is entirely spontaneous, I do not know how the vote will go. I am not running against Dr. Weston. If I can help, I will be glad to do it but if you do not want to elect me I won't be mad. This is spontaneous, I don't know how to handle it, I am going to get out. (Dr. Cain leaves the room, and Dr. Workman takes the Chair.)

DR. WORKMAN: Do I hear a second?

(There were several seconds from the floor)

(The suggestion was made from the floor that time would be saved if the voting were by secret ballot.) Gentlemen, vote by secret ballot for Dr. William Weston, Jr., or Dr. Joe Cain for Delegate to the American Medical Association. First, are there any other nominations?

(Dr. Evatt moved that the nominations be closed, seconded by Dr. Workman, the vote was taken and it was so ordered.)

In order to save time while we are counting these ballots, we will entertain a motion for an alternate delegate to the A.M.A., a two-year term, the term of Dr. Frank C. Owens expires, Dec. 31, 1961.

DR. O. B. MAYER (Recognized): I would like to place the name of Dr. Frank C. Owens to succeed himself as the alternate delegate to A. M. A., for a term of two years. (This was seconded by Dr. Crawford, and motion made that nominations be closed. This was only seconded, voted on and carried.)

THE CHAIR: (Dr. B. J. Workman)—Dr. Frank C. Owens is elected to succeed himself as Alternate Delegate to the A.M.A.

Gentlemen, Dr. Cain has been elected as Delegate to the A.M.A. Will someone ask Dr. Cain if he will return to the room, please. (Dr. Cain comes into the room) Dr. Joe, you have been elected Delegate to the A.M.A., congratulations.

DR. CAIN: Gentlemen, I hardly know what to say, you caught me completely by surprise and it is much

better that you did. I will certainly do my best to represent you in the A. M. A. in a way in which you will be proud. Thank you very much.

DR. CAIN: (Presiding) We will now go into the election of Councilors. Councilor for the Second District has finished two terms, Dr. A. F. Burnside is eligible for one more term. Nominations are now in order for Councilor from the 2nd District.

DR. COOK (Recognized): The representatives of the Second District would unanimously like to place in nomination the name of our present councilor, and vice-president of Council, Dr. A. F. Burnside. (This was seconded, motion was made by Dr. Poda that the nominations be closed and that Dr. Burnside be elected by acclamation, this was seconded, voted on and carried.)

THE CHAIR: Dr. Burnside is elected to succeed himself as councilor from the 2nd District.

The Term of Dr. John M. Brewer expires, the 5th District. His term expires this year. He is eligible for re-election.

DR. LaROCHE: (Recognized) I would like to place the name of Dr. John Brewer in nomination for re-election. (There were no other nominations, motion was made that the nominations be closed and that Dr. Brewer be elected by acclamation. This was seconded, voted on and carried.)

THE CHAIR: Dr. Brewer is elected from the 5th District.

The 8th District, Dr. Gressette having been promoted no longer fills this office. It is wide open and nominations are in order for councilor from the 8th District.

DR. HARVEY ATWILL, Orangeburg (Recognized): We would like to place in nomination the name of Dr. Joseph D. Thomas, of Denmark, as councilor from the Eighth District. (Mr. M. L. Meadors was called by The Chair to come to the rostrum)

THE CHAIR: Are there any further nominations? (Motion made that nominations be closed, this was seconded, voted upon and passed) Is Dr. J. D. Thomas with us? Would you please stand up, Dr. Thomas? (The house applauded when Dr. Thomas stood.) This is your new councilor from the 8th District.

Gentlemen, we will now go into the election of the Mediation Committee and the terms of those members from the 2nd, 5th and 8th Districts have expired. The council from each of these districts has nominated two men, whose names will be placed on the blackboard and I will ask the tellers to prepare the ballots. Now, prepare your ballots in this manner, we will put it all on one ballot, mark 2nd District, 5th District, and 8th District and then write down the name of the man for whom you are voting, according to the nominees who are put on the board. (Mr. Meadors puts the nominees on the blackboard.)

I have an announcement. The Chairman of the Mediation Committee has called a meeting of this committee, the old members and also the ones about to be elected now, immediately after this meeting has adjourned in the front part of this room, right up there by the steps.

THE CHAIR: While the ballots are being prepared and the names are being written on the board we will elect a member of the Benevolence Fund Committee, the term of Dr. Thomas G. Goldsmith expires. This nomination comes from Council, Dr. Gressette? DR. GRESSETTE: Council would like to nominate Dr. Goldsmith to succeed himself.

THE CHAIR: Dr. Tom Goldsmith has been nominated to succeed himself as a member of the Benevolence Fund Committee. (This was seconded) There were no further nominations from Council, you can either elect or reject him. (The vote was taken and carried.) Dr. Thomas Goldsmith succeeds himself as a member of the Benevolence Fund Committee.

(The Blackboard shows the following nominees for

the Mediation Committee)

2nd District  
W. H. Bridgers  
G. A. Poda  
5th District  
Ripon W. LaRoche  
Halsted Stone  
8th District  
Henry Gibson  
James Wells

THE CHAIR: Mark your ballots, 2 - 5 - and 8 and vote for one man for each district on a plain sheet of paper. Thank you.

#### State Board of Medical Examiners

THE CHAIR: Two vacancies for a four-year term. One for the First Congressional District, the term of Dr. A. R. Johnston expires, and the other is the Third Congressional District, Dr. Wm. P. Turner, Jr. term expires.

Nominations are now in order for a member of the State Board of Medical Examiners from the 1st Congressional District. Dr. Hugh Pearson, Beaufort, recognized.

DR. PEARSON: Our delegation would like to place in nomination Dr. Wescoat A. Black's name as a member of the State Board of Medical Examiners from the First Congressional District. In 1935 in this city and I believe in this room Dr. Black was duly elected representative from his district, which was the Sixth at that time, also during that year due to a shift in the allocation of counties to the Congressional Districts Dr. Black was disqualified and never allowed to serve. He has been a practicing physician in Beaufort for the last 30 years, he graduated from the Medical College here in 1927 and has been an active Blue Cross representative for the past eight years. Those of us who know him think he would be a capable addition and a capable member of this board. (This nomination was seconded)

THE CHAIR: Any further nominations? Dr. Harvey Atwill, (Recognized)

DR. ATWILL, Orangeburg: I would like to place in

nomination the name of Dr. A. R. Johnston, of St. George, who has done an admirable job.

THE CHAIR: Dr. A. R. Johnston has been nominated to succeed himself. Are there any other nominations? (There were none.)

THE CHAIR: Has everybody voted for the Mediation Committee? Now, prepare your ballots for a Member of the State Board of Medical Examiners from the 1st Congressional District—Dr. A. R. Johnston or Dr. Wescoat Black, vote for one.

Nominations are now in order for a member to the State Board of Medical Examiners from the Third District, the Third Congressional District, are there any nominations?

(DR. -----?) I move that Dr. Wm. P. Turner, Jr., be re-elected to succeed himself.

THE CHAIR: Dr. Turner has been nominated. Are there any other nominations? (Motion was made that the nominations be closed, this was seconded, voted on and The Chair declared Dr. Turner re-elected to succeed himself.)

Gentlemen, we will now elect a member of the Hospital Advisory Council to the State Board of Health. DR. JOHN M. BREWER (Recognized): Mr. President, I move we put this off or delay this election until this tabulation is made.

THE CHAIR: Dr. Brewer has made a motion that we delay further elections until the tabulation has been made, are there any seconds to the motion? (The motion was seconded, the vote was taken and passed.) We will have a short recess. Don't get too far off.

(The Chair asked if there was anyone who had not voted on the State Board of Medical Examiners, and one doctor brought his ballot forward.)

THE CHAIR: Gentlemen, Dr. A. R. (Dick) Johnston has been elected to succeed himself as a member of the State Board of Medical Examiners from the 1st Congressional district.

We will go on and elect the members of the Hospital Advisory Council to the State Board of Health.

DR. BREWER: Mr. President, we would like to delay this until we get a report on these other committees, I believe that was my motion, before.

THE CHAIR: If that is your motion, we will continue the recess, until we get this thing straightened out.

(Tellers report on election of the Mediation Committee.)

THE CHAIR: Gentlemen, the results of the balloting on the Mediation Committee:

2nd District—Dr. W. H. Bridgers has been elected.

5th District—Dr. Ripon LaRoche has been elected.

8th District—Dr. James Wells has been elected.

THE CHAIR: Now, we will elect members of the Hospital Advisory Council to State Board of Health, do I hear any nominations, the term of Dr. J. C. Harris expires.

(DR. BREWER?): I would like to place in nomination the name of Dr. Halsted Stone. (Seconded by Dr. Wallace.)

DR. ROBERT WILSON: Mr. Chairman, I would like to nominate Dr. T. C. McFall.

THE CHAIR: That nomination is out of order right this minute. I am trying to get the ones for Dr. Harris, right now. I may be wrong in that ruling, but I am under the impression these are geographically situated. Is that true or not? (Someone from the floor stated they were not geographical.)

I will rule that we will vote on nominees—we will vote on two of the nominees. Dr. Stone has been nominated and Dr. McFall has been nominated, and we will vote on two. Are there any other nominations? (Motion was made that the nominations be closed, this was seconded.)

The motion is that the nominations be closed and that these two gentlemen be unanimously elected to the Hospital Advisory Council. (Vote was taken and it



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was so ordered, the vote being unanimous.)

We will now have to elect a committee on Emergency Medical Care, these men are nominated by Council, Dr. Gressette, Chairman.

DR. GRESSETTE (Chairman of Council): Mr. President, Council makes these nominations for a Committee on Emergency Medical Care: Bill Herbert, Charles May, Graham Shaw, R. S. Solomon, and Ray Ackerman, these we nominate, the first for a term of one year, the second and on down the line, two, three, four and five years. Thank you. (Seconded)

THE CHAIR: You have heard the nominations, all in favor of these nominations say "aye", opposed "no", it is so ordered.

THE CHAIR: Gentlemen, the final order of business is the selection of a place of meeting for 1962.

THE CHAIR: Thank you both very much. We have been invited to Greenville and Myrtle Beach and both are fine places and good hotels, now we must decide where we want to go.

DR. OWENS: I would like to make the motion to this effect that this group express the preference as to which it prefers but that the final decision of the place we go be left to Council. The reason is if we decide to go definitely then Council wouldn't have any bargaining point at all as far as charges, and things of that kind. If we express a preference then Council will be warned, but they are still in a bargaining position to get the best deal out of the hotel.

THE CHAIR: Dr. Owens has made a motion that the House express a preference but leave it to the discretion of Council for a final decision, and that final decision will be based on what, the preference that we made here, or what?

DR. OWENS: It will be based on the decision of Council.

THE CHAIR: Well, why is it necessary for us to cite a preference?

DR. OWENS: Council would like to know what the feeling of this group is.

THE CHAIR: In other words, they would like to know whether or not they would be bound by it. That is your motion, Council would be in no way bound by this?

DR. OWENS: No, this is a recommendation but not a binding vote. (The motion was seconded. There was no discussion.)

THE CHAIR: We are voting on the motion, not the place, not our preference. All in favor say "aye". All

opposed "no". (The vote was unanimous in favor of the motion.)

Now, what is your preference?

DR. GAINES: A standing vote.

THE CHAIR: For what?

DR. GAINES: Ask all that want to go to the beach, stand up, and all those who want to go to Greenville, stand up.

THE CHAIR: All those who want to go to Greenville, stand up. (Tellers count them) All those who want to go to Myrtle Beach stand up. (The report was 27 to go to Greenville and 43 to go to Myrtle Beach.)

Gentlemen for your information, regardless of Council the majority here want to go to Myrtle Beach. I hope Council understands Dr. Owens' motion, that is advice only, and other factors will be considered.

Gentlemen, the meeting is not adjourned. The Chair at this time extends the floor to Dr. James H. Gressette.

DR. GRESSETTE: I tell you, this floor is hard to get from Joe, he promised me this morning I would get the floor for this purpose early this morning and here it is the last thing. At this time, Dr. Workman, the society would like to present this to you for being our Vice-President last year, for all you have done and we have enjoyed having you work with us. (Gift is handed Dr. Workman)

DR. WORKMAN: I want Joe Cain to be assured it has been a real pleasure to work with him this year, the only thing—I have had difficulty in keeping up with him. I appreciate this very much and as the years go by it will remind me of very fond memories.

DR. GRESSETTE: The other one is an unusual surprise, too, "the South Carolina Medical Association presents to Joseph P. Cain, Jr., M. D., this certificate of office held in this Association, in grateful appreciation of his service. President 1960-61, Chairman of Council 1954-59, Robert Wilson, Secretary."

Joe, I could take this and I could discuss—I could tell them how many times I have seen you get mad and perspiration running down your back, when somebody crossed you up in a meeting on the floor, and I tell you that we appreciate it, we appreciate all you have done for us and we appreciate all you are going to do for us.

DR. CAIN: Thank you.

Is there any further business? Have we forgotten anything? This is the end now, no argument until next year.

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# The Journal of the South Carolina Medical Association

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## PEPTIC ULCERATION OF THE STOMACH AND DUODENUM

ROSS Z. PIERPONT, M. D., F.A.C.S.

*Baltimore, Maryland*

**T**his subject has been very close to me—in fact, much too close for comfort, for having been a victim of the disease for the past 18 years I speak with some authority on its problems.

I believe firmly that one of the statements made by an old friend, Dr. Paul of the University of Iowa, is, in general, correct. "If you are not half a damn fool in the first place, you never have an ulcer." This is certainly more true in duodenal ulceration where stress appears to be such an important factor. It is no secret to anyone who has been afflicted with this disease that if he is relieved of his responsibilities and pressures, a normal dietary existence with little difficulty is not only possible but probable. Dr. Kirschner of Chicago, relates the problem of a man under his care who had an intractable ulcer with three massive hemorrhages. All manner of medical management failed in this particular case, until the man shed an intractable wife. Following this, the man was *sans* wife and *sans* ulcer.

Such is the evidence of the emotional and stress factors in the production of peptic ulceration. Many other factors are known to all of you—alcoholism, malnutrition, Curlings ulcer in severe burns, etc. However, there are two other factors which have been brought to light more recently; notably the condition described by Ellison and Zollinger which is said to be due to a chemical agent released by a

special islet cell tumor of the pancreas, and the ulcer seen in liver cirrhosis in which it is felt that the gastric secretory stimulant from the intestine is not properly inactivated by the liver. Finally, there is the ulcer of steroid therapy.

The pathogenesis of peptic ulceration has received a tremendous impetus from the work of Dr. Lester Dragstedt. It has been he, more than anyone else, who has called our attention to the fact that while peptic ulceration of the stomach and duodenum is in both cases primarily the product of hyperacidity, the pathogenic mechanism of the two ulcers is vastly different.

A brief review of Dr. Dragstedt's concept is in order. It is felt that there are two principal methods of stimulation of the acid secretory mechanism of the stomach. One of these is through nervous stimulation by way of the vagus nerve. The other is by hormonal means through the production of gastrin by the antral portion of the stomach. Further, it is believed that the duodenal ulcer is caused primarily by the vagal nervous mechanism, while conversely the gastric ulcer is caused by the gastrin hormonal mechanism.

The support for this thinking fits in with the many experiments carried on by Dragstedt over a long period, plus the clinical application in the form of patient evaluation with the Dragstedt form of gastric analysis. Briefly described, this consists of the use of a clear liquid diet for the evening meal, followed by

nasogastric intubation with emptying of the stomach at 7:00 P. M. The patient is then allowed to be as quiet as possible and all secretions are collected during the 12 hour period to 7:00 A. M. At this point, histamine is administered and a second specimen is collected at 9:00 A. M. The first specimen, or night secretion, represents vagal activity and the second specimen hormonal activity.

With a great deal of uniformity, Dragstedt has been able to demonstrate hypersecretion and hyperacidity in the night secretions of the duodenal ulcer patients with a relatively low value for the hormonal phase. The converse has in general been true for the gastric ulcer. Certainly, this is not 100% correct and there are areas where both values are high, etc., but this has been the overall general pattern.

Bearing in mind these foregoing factors, the treatment of peptic ulceration takes on some rational basis. It becomes quite obvious that anything which can be done to relieve the nervous stimulation will most certainly cut down on hypermotility, hypersecretion and hyperacidity in the duodenal ulcer. Hence, the value of phenobarbital and other sedatives and tranquilizers. It is in this area that conceivably psychotherapy could have its greatest effect. Anything that will slow down the central nervous system discharge through the vagus mechanism is of value. The anticholinergics, such as Banthine, Probanthine and the like, have a more direct action on the vagal mechanism itself, but the end result is the same—notably, to cut down the exciting stimuli from the vagus nerve and thus decrease the production of hydrochloric acid.

All of the foregoing have as their rationale one thing in common and that is to cut down the hydrochloric acid production in the stomach. Dietary management has a similar rationale with bland, non-stimulating frequent feedings literally to soak up the secretions of the stomach, neutralize acidity and, perhaps, slow motility. Along with the use of suitable diet, various substances for neutralization of acid in the empty stomach are added. It is generally agreed that the liquid antacids, such as Maalox (Rorer), Amphogel (Wyeth), Fluagel (Breon), etc., are the more satisfactory drugs for administration from the standpoint

of pure efficiency of therapy. However, if any of you have had personal experience with this problem, it is perfectly obvious how much more convenient it is to carry a package of pills than a bottle of liquid. Consequently, the flood of the tablet antacids. It has been said that any liquid antacid in proper dosage will protect and buffer almost all of the acid of the stomach for about one and one half hours. However, many of the tablet antacids fall short of this goal. Alglyn (Brayten), which is a brand of dihydroxy aluminum aminoacetate (N.N.R.), has the capacity to reproduce similar results to that of the liquid antacids. The same product is also marketed under the name of Robalate (Robins).

When the ulcer is active, it would appear that the use of the antacid should be on an hourly basis between meals and generously at bedtime, with possibly a dose during sleeping hours by awaking the patient once during the night. Less frequent administration may leave dangerous times for hyperacidity.

Briefly, the medical management lies within combinations of the foregoing. Certainly a patient with a very acute ulcer is best hospitalized with rigid routine. However, the average ulcer is more or less a life-long disability with recurrence and healing progressing intermittently. Some sane rationale of therapy which allows the patient to get along satisfactorily in society and maintain reasonable control of his ulcer seems to be in order. This should be highly individualized. In my opinion, it is worthless to ruin an individual mentally and spiritually, simply to cite the cure of a physical ailment.

The same type of rational thinking can be applied to the surgical treatment of peptic ulceration, which in our hands has been reserved primarily for the complications of the disease.

There is general medical agreement on the prompt closure of perforated ulcer in spite of a small minority who would use gastric suction to treat this complication. Suction therapy alone is a very hazardous procedure to pursue in most situations. The two controlling factors in mortality still continue to be the age of the patient and the time interval from perforation to closure or definitive surgery.



Hemorrhage which is acute is treated in the following manner. If the hemorrhage is an initial one and subsides promptly under usual medical management, and the patient is young, he is evaluated and treated as any other patient with peptic ulceration. If the hemorrhage is repeated, or continuous, or if the individual falls in the older age group—i.e. above 50 years—then surgery is advised; and it is simply a question of proper timing, which is a highly individualized consideration. It should be borne in mind that 60% of all the massive upper gastrointestinal hemorrhages are due to peptic ulceration.

Obstruction, if it is acute, is treated by intermittent gastric suction, rapid institution of proper fluid balance and early surgery. It is especially important here to call attention to the fact that continuous gastric suction in a complete pyloric obstruction can cause irreversible alkalosis to develop very rapidly. If the obstruction is partial, the patient can usually be managed successfully and treated with elective surgery as deemed appropriate.

No longer are there many advocates of a 90% resection, and on the other side of the coin, there are few advocates of simple gastroenterostomy, except in very special circumstances.

What then determines the individual approach to this problem?

With the precepts presented as a foundation, we carefully reviewed our experience with subtotal gastrectomy. This was found disappointing from the standpoint of late complication in the form of post-prandial pain, dumping syndrome, weight loss and anemia.

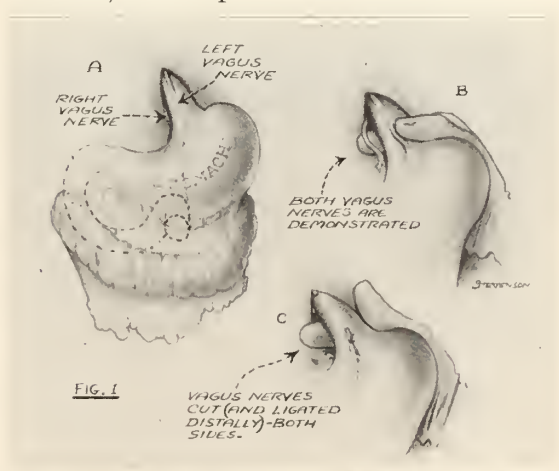
In spite of the fact that most of the patients were satisfied with their results, it seemed to us that they were frequently pleased that they had traded a greater for a lesser evil.

Mortality was not a factor for consideration in our limited series; but comparatively the mortality is reported as 1 to 3% for vagotomy plus a drainage procedure whereas the mortality is reported to be as much as 5% in gastric resection.

Therefore, beginning in 1953 we adopted vagotomy with drainage as the usual operation for duodenal ulceration as an elective procedure. This has even been extended to in-

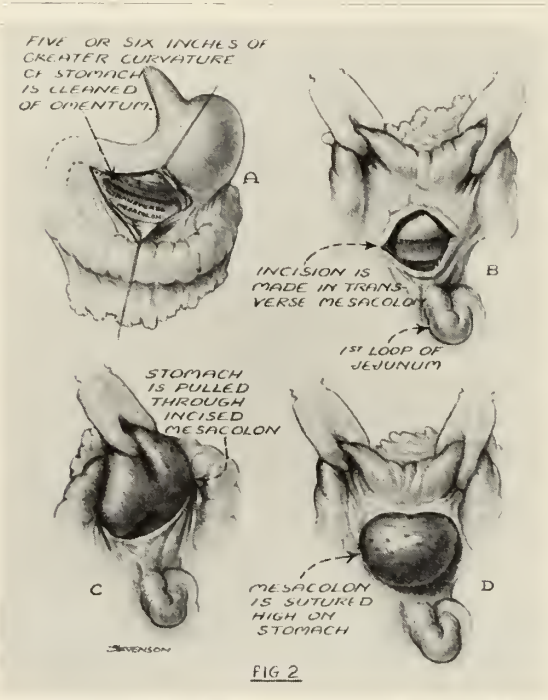
clude bleeding duodenal ulcer by using simple ligation and oversewing of the bleeding area by duodenotomy in combination with vagotomy and drainage. The results have been encouraging enough to stimulate a reporting at this time. The usual operation is described with the admonition to bear in mind that variations are applicable to specific cases.

*The Procedure:* An indwelling nasogastric tube is put in place. The abdomen is opened through an upper midline incision and the usual exploration is carried out. If the decision for vagotomy and gastroenterostomy is made, the peritoneum is broken through by blunt dissection to the left of the esophagus. Dissection is carried left to right with careful delineation of the crura of the diaphragm. The right vagus is picked up posteriorly and to the right as a strong cordlike structure and stripped blindly for a short distance (Figs. 1A and 1B). The peritoneum medial to the

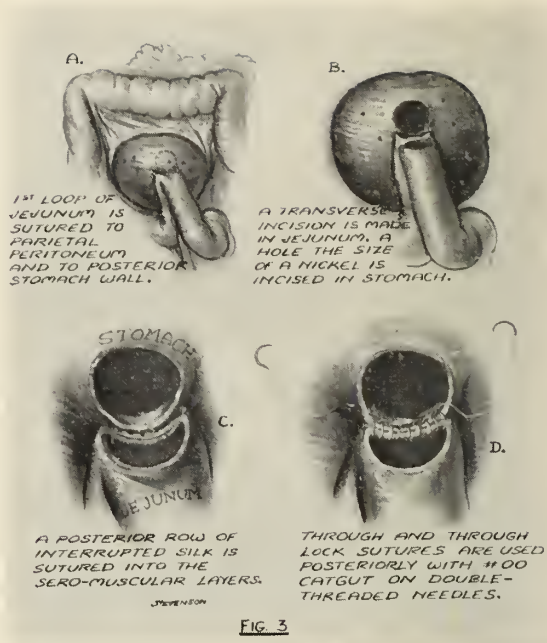


esophagus is then broken through bluntly and blindly with the forefinger posterior and the thumb anterior. This clears the esophagus everywhere except immediately anteriorly; and this is removed by dissection with a Kelly clamp (Fig. 1B). The entire esophagus can then be delivered into the abdomen for two to three inches. The principal vagus trunks are then easily identified and excised (Fig. 1C). The distal ends are ligated with #00 black silk because of bleeding which may occur. The left vagus trunk must be sought in the muscular wall of the esophagus anteriorly. Any other suspicious strands are divided, thus completing a virtual circumcise of the esophagus.

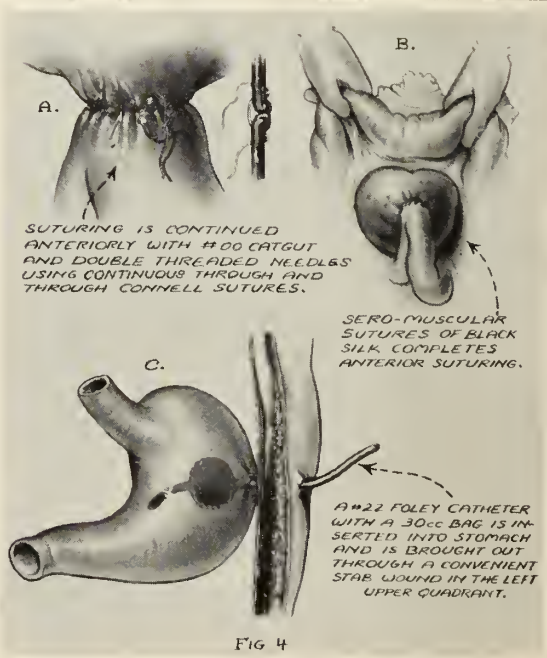
The site for gastrojejunostomy is selected close to the pylorus, the greater curvature being cleared for a distance of about five to six inches (Fig. 2A). Usually the anastomosis



is placed no further than one and one half inches from the pylorus directly on the greater curvature. This is altered in circumstances of long standing obstruction where the dependent portion of the stomach is more to the left and a different point of actual dependency must be considered. An opening is made through the transverse mesocolon in an avascular area to the left of the middle colic artery (Fig. 2B). The mesocolon is sutured high up on the stomach wall, well away from the area of anastomosis to prevent late constriction (Figs. 2C and 2D). Using fine silk sutures a very short no-loop type of anastomosis is created by suture with two or three fine silk sutures on the antimesenteric border of the jejunum, uniting this to the posterior peritoneum and the posterior stomach wall just distal to the ligament of Treitz (Fig. 3A). The anastomosis is made on the antimesenteric border of the jejunum with the greater curvature of the stomach, from which a circular section is removed about the size of a five cent piece. The jejunum is completed in a conventional two



row anastomosis, by the use of an outer row of interrupted Lembert seromuscular sutures of black silk and an inner row of continuous sutures of posterior lock and anterior Connell sutures of #00 chromic eatgut (Figs. 3C and 3D, Figs. 4A and 4B). The abdomen is closed in routine fashion in layers or, in possible anticipated evisceration, with alternating through and through wire and Jones sutures of #1 chromic catgut.



During the past five years it has been our habit to supplement the operation with a simple tube gastrostomy. A #22 Foley catheter of 30 ml. bag capacity is inserted fairly high up in the anterior wall of the stomach and secured with two pursestring sutures of black silk (Fig. 4C). The outer silk pursestring is secured to the parietal peritoneum at the point of exit of the catheter through the abdominal wall. This is through a separate stab wound in the left upper quadrant. After the pursestring sutures are tied, the bag is inflated with water and the stomach is drawn snugly to the parietal peritoneum (Fig. 4C). The catheter is secured externally by a #32 S.S. wire suture. One word of caution—in introducing the catheter, it should be brought from without in through the abdominal wall and then inserted into the stomach. This seems quite elementary; but we have observed ourselves and others attempting to extricate the drainage end of the Foley catheter through the small stab wound in the abdominal wall—no pleasant task, I assure you.

I believe that no single addition which we have made has brought more comfort to the patients in the postoperative period than this simple method of gastric drainage. Complications have been nil. The procedure affords a much sounder observation if late bleeding or partial obstruction occur. Gastric analysis for efficiency of vagotomy may also be checked as well as gastric retention. I cannot over-emphasize its value in the elderly patient.

Postoperative gravity drainage is maintained for 48 hours. The tube is clamped and feeding begun in graduated fashion. Full diet is usually tolerated by the sixth to seventh postoperative day. The tube is removed in six to eight days and drainage rarely occurs and persists.

All of the foregoing has concerned duodenal peptic ulcer management. What about gastric ulcer?

We believe that gastric ulceration in individuals above the age of 45 years, without some mitigating circumstances to contradict surgery, is a surgical lesion. Where practical, with the ulcer in the distal one third of the stomach, a short gastric resection with Bill-roth I anastomosis or gastrojejunostomy is quite satisfactory. In ulceration in other areas

of the stomach, with the issue in doubt as to malignancy, we believe that simple wedge resection of the ulcer with frozen section is indicated. If the lesion is benign, a combination of the wedge resection with gastroenterostomy of the type described is very satisfactory. The path for wide resection, if the ulcer is malignant, is clear. Vagotomy is not usually necessary for gastric ulcer unless the cephalic phase of acidity is high, which is occasionally the case.

*The Material:* There have been 60 patients treated by surgery using vagotomy in the last six years. Among these, there were 42 males and 18 females in a ratio of 2.3 to 1 with an average age of 50.3 years. The youngest was 19 years and the oldest 73 years. Duodenal ulcer comprised 53 cases with gastric ulcer numbering 4. Three combined duodenal and gastric ulcers completed the list.

TABLE I	
SURGICAL PROCEDURE	
Vagotomy and Gastro-enterostomy	48
Vagotomy, Gastrectomy and Gastro-enterostomy	8
Vagotomy, Wedge Resection and Gastro-enterostomy	2
Vagotomy, Pyloroplasty	2

The type of procedure is outlined in Table I indicating that while the vast majority fitted the conformity necessary for vagotomy and gastroenterostomy, the necessity for substitution and the use of other procedures is ever present.

TABLE II	
INDICATIONS FOR SURGERY	
Intractable Pain, Refractory to Medical Management	24
Hemorrhage	16
Obstruction	15
Repeated Perforation	5
Note:	
One with Perforation and Hemorrhage	
One with Obstruction and Hemorrhage	

The indications as listed in Table II are essentially those of all series and are not remarkable. Sometimes I think that we are too reluctant to operate earlier on intractable ulcer, but this is purely a matter for debate at present. The procedure has been singularly free from major complications. There have



been no deaths. There was one wound abscess and one deep thrombophlebitis of the leg.

Dumping syndrome, loss of weight and anemia have not been observed. There has been the usual early difficulty with vagotomized patients in about 60%, in the form of flatulence, distention, eructation and diarrhea. This has taken various forms in various individuals. However, all have responded very well to Urecholine (bethanecol chloride) therapy, usually given 15 mg. three times a day, one half hour before meals, and none has persisted longer than three months.

There have been no demonstrable recurrences although admittedly it is early for evaluation. Two patients have been readmitted late to the hospital for symptoms—one four years and one one year following surgery. The first patient proved to have spastic nonspecific

colitis which responded to medical management, and the second had esophageal hiatus hernia which was repaired.

#### Summary

The procedure of vagotomy and gastroenterostomy has been the basic treatment for the elective management of peptic ulcer of the duodenum in our hands during the past six years. During this time 60 patients have been treated with no mortality and a low morbidity.

#### Conclusions

Vagotomy and gastroenterostomy properly and painstakingly applied offer an excellent method for the elective surgical management of duodenal ulcer and in selected cases of bleeding duodenal ulcer.

The operation is technically easier, gives a lower mortality and leaves less morbidity than gastric resection in our hands.

#### REFERENCES

1. Dragstedt, L. R.: Some comments on the cause of peptic ulcer. Mississippi Valley M. J. 82:115, 1960.
2. Dragstedt, L. R. and Woodward, E. R.: Appraisal of vagotomy for peptic ulcer after seven years. J.A.M.A. 145:795, 1951.
3. Dragstedt, L. R.: Cause of peptic ulcer. J.A.M.A. 169:203, 1959.
4. Dragstedt, L. R.: Evolution of modern surgery for peptic ulcer. Am. J. Digest. Dis. 4:247, 1959.
5. McCallough, J. Y.: Evaluation of vagotomy and accompanying drainage procedure. J.A.M.A. 170: 2162, 1959.

*External cardiac massage*—R. Baringer, E. Salzman, W. Jones, and A. Friedlich. New Engl J Med—265:62 (July 13) 1961.

Closed chest cardiac massage was used in 84 unselected cases of circulatory arrest. The heart was compressed by external pressure applied 60 to 90 times per minute over the lower sternum. The survival rate is largely dependent on the nature of the underlying disease. Effective circulation was maintained with palpable pulses and nondilated pupils in the majority of patients. An effective heart beat was restored in 36 patients. The method permitted electrical defibrillation of the heart in 10 of 18 patients with ventricular fibrillation. Of 23 who survived over 3 hours, 19 died of their underlying disease. Four left the hospital in good health. Postmortem examinations in 46 patients revealed rib fractures in 15 and hepatic trauma in 5. The procedure is effective in maintaining circulation for prolonged periods. It can be used where thoracotomy and open cardiac massage would not be practical.

*Congenital cataract: incidence in one family*, by C. W. Evatt, M. Alter and Elsie Taber (Charleston)

South. M. J. 54:639, June 1961.

There are many causes known and unknown of Congenital Cataract. This article reports on a study extending over a period of seventeen years, embracing four generations of one family where fifteen were born with bilateral cataracts. All except one have been operated on and have useful vision. The unoperated one has 20/25 vision despite small central cataracts in each eye. Ages of operated persons range from four to forty eight years. There were ten males and five females. One had nystagmus and muscle imbalance. Except for cataracts all others were normal.

The effect of consanguinity and of the enzyme systems controlling carbohydrate metabolisms were studied in this family. Various classifications and theories of origin are mentioned in the report. Many congenital cataracts occur sporadically and are therefore due to an agent peculiar to the individual; others occur familiarly and are therefore probably dependent upon some maternal abnormality, while others are markedly hereditary, being transmitted by the father as well as the mother and therefore in these a germinal cause must be assumed.

Clay W. Evatt

# MAJOR EYE SURGERY AS AN OUTPATIENT PROCEDURE

J. W. JERVEY, JR., M. D.

Greenville, S. C.

I gratefully acknowledge the honor done me in according to me this place on your program. All of us in clinical practice are basically scientists and as such we do well to recall what Sir William Osler in his *Aequanimitas* said, "In seeking absolute truth we aim at the unattainable, and must be content with finding broken portions." It is my hope that I have found and can share with you one of these portions.

In recent years there has been a tendency to allow surgical patients up sooner and sooner after operation. Even where the abdomen has been opened, patients are up and around in a few hours. Some severe medical diseases also, such as cases of paralytic stroke, are being treated on an outpatient basis in well recognized clinics.<sup>1</sup> Since the eye is in a peculiarly well adapted area for protection and cannot be kept entirely quiet in any case, it occurred to me many years ago that there was no need to take the then customary excessive care of postoperative eyes. My first paper on this subject was read before the Southern Medical Association in Dallas, Texas, in 1952.<sup>2</sup> There first mention in print was made as to thoughts on the postoperative care of retinal detachment, and I was accused by at least one friend of making this operation an office procedure. He was very nearly right, and I still think I was and am. I had also been gradually relaxing on the postoperative care of cataract extractions as methods of wound closure became exact and effective, and I had long since ceased to take unnecessary care of muscle cases save for ordinary measures of cleanliness.

During the past war, when hospital beds were not available, some of the best known men in this country did of necessity what I am doing now by choice and with great satis-

faction. While opportunities to serve in this way may come more regularly to the eye surgeon than to some others, nevertheless surgeons and physicians in general could dispense with hospitalization more often than they do. Those who claim otherwise have closed their eyes to the facts. The specialist has been preaching for years to the general practitioner about what he should or should not do about the eye and many other things. It is about time the tables be turned, and I would suggest to some of my general practice friends that they seriously begin to question how some specialty cases are handled. We often ask the family physician to let us see certain types of cases as early as possible. Why shouldn't he in turn ask that they be cared for and returned home as soon as practicable?

About twelve years ago I removed a cataract from a patient's only eye. He was a heart case and not able to lie down very long. Then he developed a detachment. I put the case to him that he had a condition that would certainly result in blindness if something were not done to prevent it. I explained the situation and told him of the ordinary way in which such cases were handled, but that his only chance lay in surgery, and that I was willing to operate and take the chance of not requiring immobilization afterwards. He agreed. From the time he left the table, he was allowed to sit up and to move about. The result was perfect! I therefore decided that since this man had made a remarkable recovery under admittedly adverse conditions, others could do the same thing. I began cautiously to treat other cases in like manner. Although we do relatively few detachments, our results compare favorably with other reports.<sup>3</sup>

Now as to our management of major eye surgery in general as an outpatient procedure: we have in our own building a well equipped little operating room, as fine as to be found except as to size, which however meets our

<sup>1</sup>Read at the 1961 Meeting of the Association of Surgeons of the Southern Railway System.

needs. We have our own nursing staff, capable and efficient.

In the beginning, I was very cautious in deciding on which case to operate and send home. I discussed the irregularity of the procedure as well as its advantages. It was and is always left up to the patient as to whether he wants to be first admitted to a hospital or done in our surgery and afterwards sent to home or hospital. There are, of course, cases of a complicated nature that should be done only in the hospital. Now, however, in uncomplicated cases, with the backlog of 12 years' experience, the patient is simply told that he may take his choice of several ways of being treated. He usually prefers to be operated on in our surgery and go home.

Where proper precautions are taken, one is in no greater legal danger from caring for a patient at home, than one is from treating him in the hospital. The signed permissions usually required by hospitals are practically worthless, and may even suggest unpleasant possibilities to the patient. They in no way protect the doctor and his staff or the hospital and its staff from suit in the case of negligence or malpractice, and the mere fact of the patient's coming to the office by appointment for surgery is sufficient evidence of willingness and consent. It goes without saying that all patients are properly worked up before surgery, usually in consultation with the family physician, or an internist where indicated, and that rapport between patient and surgeon is of the highest quality.

We have no trouble save for an occasional little known company about the payment of insurance claims for surgery. The companies are, as they should be, glad to pay these claims since otherwise they would have to pay a hospital bill in addition. Some even pay an operating room fee.

Let us follow a patient who has had a cataract extraction and is to go home for postoperative care. By the time the operation is completed an ambulance has arrived. The patient is lifted from the table, though I really believe he might just as well walk save for his sedation, is carried home and put in bed with the head elevated on two or three pillows. As soon as he has reacted from his sedation, he is

allowed out of bed, to sit up or go to the bathroom. He may go to the table for meals, and he is allowed to look at television with one or both eyes as long as he can do so without discomfort. I know of no way in which an eye can be held any more nearly immobile than by looking at television from a reasonable distance. Only the operated eye is covered in cataract surgery and, if this is the only eye, a plus ten lens is placed over a hole in a ring mask on the second day after operation so that the patient may have the benefit of vision right from the beginning. This is a most helpful and gratifying procedure. A protective mask is worn at night.

Visitors in general are not welcome for the first few days. With the patient at home, one can obtain better cooperation in keeping them away than he can in the hospital where there are too many outside influences and only too often actual inability to carry out orders. You are all familiar with Monday morning hang-over from hordes of Sunday curiosity seekers. At home, I can give orders directly; I can assume the full onus of being a veritable ogre in the interest of my patient and, as a general rule, he is grateful for the respite that is afforded.

After the surgery is completed some responsible member of the family is given a small supply of sterile eye patches which are to be used at home by me or under my direction. Four or five capsules of sodium pentobarbital are given in a small container to be used at night and a few capsules of Phenaphen with codein are supplied in case of pain. These are frequently not needed. We seldom see postoperative nausea or vomiting.

Patients so managed are within reasonable distance and are visited on the day after surgery, the second, and fourth days, after which they return to the office in one week for observation and for removal of sutures. No special care has to be taken at dressings which are done at my convenience before or after office hours, or during the lunch hour. After removing the dressing, the patient is asked to open his eyes. Sterile swabs put up in a paper wrapper and carried with me are used to wipe off the eye if necessary, employing Neosporin drops (polymixin, gramicidin,



and neomycin) which the patient has been using for several days before operation. No attempt is made to clean the conjunctival sac in the average case. All I want to see is that there is no evidence of infection and that the wound is closed. There is nothing more that one can do. After the fifth day, family or patient can change the dressing if needed, though as a rule by this time it can be omitted. Many patients feel that the eye should be cleaned, but it is to be remembered that tears are perhaps the most powerful antiseptic fluid in the body and should not be interfered with. Even so, after four or five days the patient is allowed to sit at his lavatory and apply hot wet towels to the closed operated eye for 20 to 30 minutes or as long as he wishes, several times a day. This affords great comfort and is best done by the patient himself. If there is conjunctival secretion, Neosporin drops are used three times a day as before operation. Protection from light is most comforting and dark glasses are supplied. Atropine is prescribed when indicated. There are no restrictions on diet unless this is medically indicated, and a cathartic of choice may be taken when the patient wishes it. Antibiotics save as above noted are seldom employed.

Glaucoma cases are seen only once at home, the day following surgery, after which they come to the office. The eye is left open after the first 24 hours. They are not required to go home by ambulance.

In all intra-ocular cases, the anterior chamber is reformed either by the natural aqueous flow, which is usual, or by air injection before the patient is removed from the operating table.

Muscle cases have the operated eye covered for 24 hours, but this is probably unnecessary, and when a child objects the dressing may be removed at once or not applied in the first place. Here cold compresses for 20 minutes, if tolerated, may help to reduce postoperative edema. These patients return to the office the day after surgery whether done under local or general anesthesia.

There is no question that the patient, particularly the older patient is much happier at home than in the hospital and, therefore, recovery is more rapid. I have never seen one of

these home-treated cases become disoriented. Furthermore, there is less chance of post-operative infection because there is no cross contamination, and the patient is in surroundings to which he is accustomed and to which he has probably become desensitized. Another thing which to me is important, is the opportunity to visit my patient in his home, and there is a good chance to become a friend rather than remain just a technician. I have been deeply touched at times to realize the genuine and deep appreciation of the personal interest shown by accepting an invitation to sit down for a few moments to chat or to enjoy the hospitality of an open fire offered in the finest spirit of friendship and good feeling. Though daily opportunities occur in the office, still greater ones open up in the home to be of real spiritual help, and the mere fact of having the patient cared for in the home lends dignity and worth to the home itself.

Many patients cannot afford prolonged hospitalization, and a few will not submit to it at all. I know that some of my patients have endured surgery and regained eyesight who would not have done so if hospitalization had been required. It is especially important that old people be not disturbed in their ordinary routines. Any of their little personal likes or dislikes should be catered to, and I particularly enquire as to the matter of alcoholic beverages. If an older person, or a younger one for that matter, is accustomed to a highball, or even two, at any time of day, it is well that this not only be allowed but encouraged.

I would not pass over the difficulties involved. This method may not suit your easiest convenience or mine. There may be calls from home that you would not receive if the patient were in a hospital, but they are exceptional; the family may be apprehensive about nursing care and about the appearance of the eye if they are present at the dressing. However, all of these things can be well handled with a small amount of tact and common sense. One point must be watched. Sent home, the patient may gain the idea that the surgery he has had is of little consequence. He must constantly be reminded that because he is allowed home does not mean that he is not to take every

reasonable precaution and to follow orders. Overuse of the eyes or bodily fatigue may prolong and render the recovery period more uncomfortable.

On the purely selfish side of the question, and there is this side, I can almost completely remain the manager and the master of my time. There are few irritating delays, and much valuable time is saved between cases when one can see several patients while waiting for the next case. This is an unadulterated delight.

Wherever major surgery is undertaken, I want a satisfactory answer to three questions: one, do you want the operation? two, do you want me to do it? and three, do you believe it will be successful? I want my patient to have a strong faith in his heart, and not just on his lips. One can usually recognize sincerity. Beware of the over-enthusiastic person as well

as the reluctant one. These I should like to go to someone else.

In the past nine years, exclusive of cases done in the hospital, we have operated in our own surgery, on an outpatient basis, on approximately 200 cataracts, 150 muscles, 50 glaucomas, plus several hundred miscellaneous cases of needlings, traumatic repairs, intra-ocular foreign bodies, tumors, enucleations, and pterygia. In all these years, I have never seen a complication that could be attributed to the postoperative care of these patients. The few complications which we have had, generally speaking, have been in the hospital cases. This system has been evolved over many years and to it I have given much time, thought, and preparation. I believe it to be safe and sound, and I know it to be satisfactory.

REFERENCES

1. Burney, L. E.: Leaders of our medical future. *Pharos of Alpha Omega Alpha* 24:24, 1961.  
2. Jerve, J. W., Jr.: Postoperative care of major eye surgery. *South. M. J.* 45:139, 1952.  
3. Jerve, J. W., Jr.: Postoperative care of retinal detachment. *Tr. Am. Ophth. Soc.* 55:317, 1957.

LEADING CAUSES OF DEATH,  
SOUTH CAROLINA  
(by occurrence)  
Calendar Year 1959

Cause	Total Deaths
Heart -----	6,429
Intracranial Lesions of Vascular Origin -----	2,772
Cancer -----	2,211
All Accidents -----	1,499
Diseases peculiar to the First Year of Life ----	1,016
Pneumonia — All Forms -----	666
Digestive System -----	663
General Arteriosclerosis -----	372
Kidneys -----	359
Diabetes Mellitus -----	282
<hr/>	
Total Leading Causes of Death -----	16,269
Total All Other Causes of Death -----	3,218
Total All Causes of Death -----	19,487
<hr/>	
Total Live Births for 1959—59,975	
Prepared by:	
Bureau of Vital Statistics	
South Carolina State Board of Health	
Released by:	
Maternal and Child Health Division	
April, 1961	

# MEDICAL COLLEGE CLINICS

## THE MEDICAL COLLEGE OF SOUTH CAROLINA

### ELECTROCARDIOGRAM OF THE MONTH

#### Myocardial Degeneration in Myasthenia Gravis

DALE GROOM, M. D.  
Dept. of Medicine

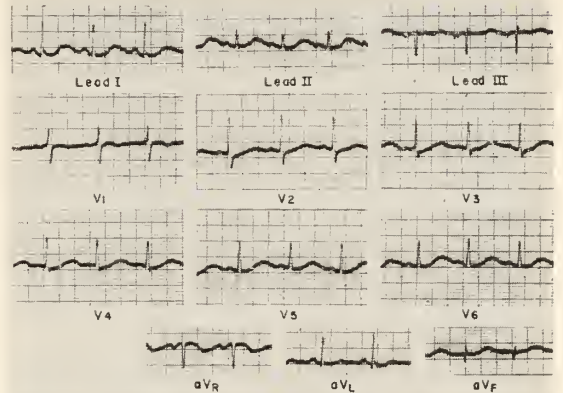
*Case Record*—A real cardiac rarity is this case of myasthenia gravis with fatty infiltration and degeneration of the myocardium resulting in congestive failure and death.

Neurologically the patient's course was one of typical muscle weakness of minimal degree in the mornings, becoming progressively worse as the day wore on. Symptoms began at age 63 when she first noted transient diplopia, inability to raise her arms over her head, then dysphonia, drooping of the eyelids and finally generalized muscle weakness and dysphagia. Response to treatment with anticholinesterase drugs was reasonably good although considerable difficulty was encountered from gastro-intestinal side effects.

Her cardiac history was somewhat obscured by the more obvious neurologic and G. I. problems. However during the four years from the onset of her illness until death there was mention of substernal pain on exertion and, ultimately, increasing dyspnea, a moderate elevation of blood pressure, congestive failure and a rather sudden demise characterized by chest pain, tachycardia and shock which proved refractory to the usual measures of treatment.

At the time this electrocardiogram was made the patient's serum potassium was normal (4.51 mEq). Several determinations of the potassium, as well as of sodium, chlorides, CO<sub>2</sub> combining power and the blood urea nitrogen were likewise normal on this and previous hospital admissions. Late in the illness moderate cardiac enlargement and atony of the esophagus were noted by the radiologist.

At autopsy the heart weighed 510 grams. The remarkable finding was that of very extensive deposition of fat beneath the epicardial surface with grossly evident replacement of much of the myocardial tissue of both ventricles by fatty infiltration. Microscopic sections prepared with special fat stains disclosed bands and lobules of adult type adipose tissue separating atrophic myocardial muscle fibers and narrowing the diameter of the bundles throughout the entire ventricular wall. A section of papillary muscle showed almost complete replacement by adipose tissue. In the coronary arteries there was a moderate amount of atheromatous plaque formation without any demonstrable thrombosis or occlusion. The heart valves were



grossly normal. Similar deposition of fat was found in the liver which weighed 1300 grams and showed advanced fatty degeneration of lobules, particularly in areas surrounding a central vein. A thymoma was not present nor were any remnants of thymus gland discernible in tissues removed from the mediastinum. Partially organized thrombi were found in secondary branches of the pulmonary arteries of two lobes, with areas of focal atelectasis distal, but the microscopically evident organization and attachment of the thrombi to the intima of the vessels was more indicative of primary thrombosis rather than of pulmonary embolism which was cited clinically as the immediate cause of death. The pathologic diagnosis was fatty infiltration and degeneration, severe, of heart and liver, of a degree sufficient to account for a cardiac death.

*Electrocardiogram*—The tracing, the only one recorded on this patient, shows remarkably little in contrast to the severity of the pathologic changes in the heart. Amplitude of the QRS complexes is not reduced as one might expect in an infiltrative or atrophic myocardial disease. The electrical axis is horizontal, ventricular depolarization being directed predominantly toward the left arm, but there is no delay in intrinsicoid deflections suggestive of hypertrophy. The appearance of typical left ventricular complexes as far to the right as V-2 is indicative of counter-clockwise rotation of the heart around its long axis.

The conspicuous abnormality in this tracing is the magnitude of the U waves in virtually all leads except V-1 where the T wave is seen to end approximately 0.34 sec. after onset of the QRS.

*Discussion*—The significance of the prominent U waves here is unknown. Repeated serum potassium determinations ruled out a hypokalemia though conceivably the intracellular level of potassium could have been low. For example, in certain myopathies, as well



as in familial periodic paralysis, the concentration of potassium within the muscle cell is known to become deficient in relation to serum levels but this has not been regarded as a feature of myasthenia gravis. There was no dietary restriction of sodium or potassium, no vomiting, diarrhea or diuretic therapy to account for excessive loss. Furthermore administration of potassium resulted in no evident clinical improvement. In the past potassium has occasionally been used more or less empirically in this disease along with the major therapy, the anticholinesterase drugs.

There appears to be more than a coincident association between myasthenia gravis and heart disease. Several cases with myocardial involvement have been reported,<sup>1</sup> the histologic picture ranging from focal atrophy to extensive necrosis of muscle cells, some with interstitial infiltration of chronic inflammatory cells, leading to death in cardiac failure. In most in-

stances a thymoma was present and similar histologic changes were found in skeletal muscle. Fatty infiltration with fibrosis and degeneration of the myocardium has also been reported,<sup>2</sup> along with various cardiac arrhythmias, conduction abnormalities and cardiac enlargement attributed to distention of a myocardium which has lost its tone. It may well be that some of the deaths ascribed to "respiratory paralysis" in myasthenia gravis patients are in reality due to cardiac failure, as apparently occurred in this case. Unfortunately the neurological manifestations of the disease are so prominent and their therapy so specific and dramatic that attention is readily diverted from other symptoms.

A systematic evaluation of the cardiac status of patients with myasthenia gravis would seem to be warranted.

#### REFERENCES

1. Mendelow, H., and Jenkins, G.: Studies in myasthenia gravis: cardiac and associated pathology. *J. Mt. Sinai Hosp.* 21:218, 1954.
2. Legrand, R., Desruelles, J., and Gerard, A.: The heart in neurological diseases. (Abstracted in *Excerpta Medica*, Section XVIII, Vol. I, p27, 1957.)

*Drug therapy of hypertension*—J. H. Moyer and A. N. Brest. *Arch Intern Med* 108:231 (Aug.) 1961.

The use of ganglionic blocking compounds in combination with Rauwolfia and chlorothiazide proved to be an extremely effective method of blood pressure reduction in patients with moderate and severe hypertension. The concurrent use of Rauwolfia and the thiazide derivative significantly potentiated the antihypertensive effectiveness of the ganglioplegic drugs and also diminished the incidence and severity of accompanying side reactions. Subjective improvement occurred in most instances after significant blood pressure reduction was accomplished. In addition, associated vascular deterioration was generally arrested and objective improvement was often noted. Improvement in renal function was variable. When there was ample reserve, the effect of ganglionic blockade in depressing renal vasospasm often increased renal function; but kidney function was sometimes further impaired when the renal status was borderline. The most important aspect of therapy with ganglion blocking agents is effective dose titration. Dosage requirements are extremely variable; therefore "average" doses are frequently ineffective in individual instances.

*Improper attire of surgeons: A means of contamination.* Editorial. William H. Prioleau, M. D. (Charleston), *The American Surgeon* 1961, 27:561.

Careless attire and improper dress of surgeons, as noted in operating rooms and medical illustrations, must be considered a cause of hospital acquired infections. The floor is now recognized as an important reservoir of pathogenic micro-organisms which are spread by personnel, inanimate objects and air. As the surgeon, more than most other personnel, comes into contact with infectious cases on the wards and in the office, he should take particular precautions not to be a means of cross contamination. The scrub suit should be freshly laundered, the scalp hair covered in front and back, the mask effective, and the shoes clean or overshoes worn. The scalp hair should be adequately trimmed, the finger nails short, and the skin free of pyogenic infection. The article is supported by photographic illustrations of the incorrect and the correct attire.

*Of general interest about the eyes.* J. W. Jervy, Jr., M. D. (Greenville) *Tri-State M. J.* 9:6-7, May 1961.

A case is made for the toughness of the eye as against the usual conception of its fragility. The importance of glasses is minimized, as it should be. The general practitioner is urged to recognize and treat the simpler eye conditions while a few warnings are given regarding the referral of the more serious conditions which should be treated by the ophthalmologist.



## President's Page

You know that not many of the professions enjoy the freedom that the doctors of America do. I wonder if you have ever taken the time to stop and think of the many things that you can do without any restrictions whatsoever. Certainly the unions do not have this privilege, for they are restricted by the number of hours that they can work, the membership in the union is more or less compulsory, your privileges are determined by the union, and the amount that you can even make. Of course, in medicine you belong to your various societies, starting at the county level, but then there is not a "mop-up squad" that is going to force you to join. You work as hard or as little as you desire, make as much as you want and charge what you think the service is worth. Perhaps this last statement is the most misused and abused of all the freedoms that we, as doctors, enjoy. It is not generally abused and not misused by the majority, but the minority that do abuse and misuse, paint the picture that all doctors of medicine are sometimes accused of resembling.

There are other things that a minority of the doctors have done, and in some cases are doing, that reflect on the majority, and this is most unfortunate, but as long as the majority go about doing the good that they do, being honest in their work, and to their patients, I believe that we can and will continue to have these freedoms that we enjoy now. However, they will not continue to exist, unless each individual takes it upon himself to see that medicine's IMAGE (if you care to call it that) is the reflection of you and all the other doctors like you, who are trying to deliver the best and most conscientious service to the patients that they serve, and at the most reasonable cost that is possible to do this service.

I may be wrong, but it seems to me that it was Patrick Henry that said; "The price of Liberty is eternal vigilance". This applies to the practice of Medicine as well as any other profession, for the deprivation of your freedom in the selection of your patients, the choice of treatment, and the pursuance of continued learning, would be the most disastrous catastrophe that could befall this profession that we, and our predecessors, have loved and worked for so well.

Charles N. Wyatt, M. D.

# Editorials



## PROFESSOR OF SURGERY

Doctor Frederick Evert Kredel, master surgeon, professor of surgery, is dead.

The loss to the Medical College of South Carolina and to the State and its people as a whole is not to be taken lightly; he will not be readily replaced.

A mild mannered and soft speaking man, his qualities, accomplishments and value were fully known and acknowledged by his close colleagues of the faculty and in foci over the state and the nation, but they were not publicized by him. A man of absolute integrity, with a breadth of knowledge and experience not limited to the immediate area of his professional work, he was of quiet and unassuming nature. Withal, however, when the chips were down he never left doubt as to his position. When he spoke it was with authority, and was so taken. He tended to hew straight

to the line; expediency was not in his vocabulary.

A native of Pennsylvania, a Master of Science at the University of Pittsburgh, a Doctor of Medicine at Johns Hopkins University, a finished surgeon at the University of Chicago, he came to the Medical College of South Carolina in 1937, as its first full-time academic career faculty member in surgery. There he began the organization of a modern teaching service and the training of surgeons through a four-year apprenticeship in education, research and preparation for the practice of surgery. From a beginning of one resident trainee, who will be remembered as Dr. Horace G. Smithy, of pioneer heart surgery reputation, the pupils of Dr. Kredel are now well scattered as leading surgeons over South Carolina and over the country. The residents in that postgraduate training service now number ten or more annually, not including those in the surgical subspecialties.

As head of the department of surgery and chief of that major service in all of the clinic and hospital activities of the Medical College, Dr. Kredel was the guiding light in the planning and organization of that area of the Medical College Hospital when it was built. When it opened for service as a medical school teaching, service, and research hospital in 1955, he came into his full and well earned opportunity. As the fates would have it, hard upon the maturing of his plans and success in developing one of the outstanding surgical departments of the country, the tragedies of his life beset him. A series of physical misfortunes struck separately although perhaps connectible, the last one finally fatal. Being a man of unbending determination, he would not give up to the several disabling physical mishaps, any one of which might have stopped one of less character and stamina. His death occurred when by his own decision he was seeking a measure of rehabilitation that proved a forlorn hope.

Dr. Kredel was a scientist in the true sense.



Not only was he active from the beginning in surgical research, but even at the moment of the final fatal issue he had secured outside financial aid in an important research project. He was not merely an investigator himself; he inspired his pupils and associates to research thinking and habits. Never a prolific writer of papers merely for the publicity of appearing in print, he nevertheless has very creditable standing in surgical research publications. A member of virtually all regular medical societies and an active participant in many programs, he attained high office in a number, notably the American College of Surgeons, and he belonged in the inner portals of perhaps the most exclusive organization in his career field, the Society of University Surgeons.

Although he may be classed as a bold surgeon, that position was always based on sound knowledge, judgment and a reasonable prospect of helping the patient. His services were never denied; when there was adequate reason he would operate, without regard to his "mortality statistics." Never a believer in high fees, the fee schedule which he guided into effect would not be subject to the criticisms nowadays leveled promiscuously at the medical profession.

The life and works of Dr. Kredel, the position that he occupied, as the first career academic surgeon at the institution he helped to build, the relations and the regard that he held with students, assistants, associates and colleagues of the profession, as well as the affection in which he was held by many people indebted to him, even the tragical misfortunes he suffered, may well make of him a legendary figure in the story of the Medical College of South Carolina. What he did and what he stood for were not buried with him.

Kenneth M. Lynch

### PARATHION POISONING

Parathion is now used in many parts of the world in agricultural operations, and many cases of poisoning and not a few deaths have been reported from its use. In Japan particularly there have been thousands of cases and hundreds of deaths. Treatment until this time has been largely with atropine and largely unsatisfactory. While atropine is still considered

a valuable drug in parathion poisoning, the need for a substance which would reverse the harmful process induced by parathion has been evident, and now an antidote appears to have been found in the form of pralidoxine chloride, known more simply as 2-PAM. Its action consists in the rapid regeneration of cholinesterase whose action has been previously inhibited by parathion or similar preparations.

*The New England Journal of Medicine*\* reports in detail a case in which atropine and 2-PAM were used quite successfully. It is probable that the value of this latter drug is known in poison control centers, but a somewhat more general familiarity with it might result in a reduction of the dangers from toxic amounts of parathion.

\**New Engl. J. Med.* 265:436

### FEES FOR RESIDENTS

New suggested solutions to the problem of attracting competent people into the study of medicine seem to be coming along fairly fast. A recent proposal emanating from the Student AMA and others more mature suggested that very material increases be made in the salaries paid to members of hospital house staffs so that they would not have to go through that penurious period which is now necessary to all except those who are independent financially. As a means of attracting resident staffs, this has its virtue, but it also has its vice as far as hospital financing is concerned.

Now a suggestion comes along from an eminent educator, chairman of the AMA Council on Medical Education and Hospitals, to the effect that residents should receive fees for treatment of paying patients in hospitals. Actually, New York County Medical Society has approved Blue Shield payments to licensed residents in an effort to solve the financial and teaching-patient crisis in medical education. Perhaps if this becomes a general practice it might serve to provide funds to make up the desired salaries suggested by the Student AMA.

Nowadays hospitals have relatively few strictly indigent patients as compared with some years ago, and many of the part-pay or not completely private patients have insur-

ance and other ways of meeting medical obligations. In some places it is customary for insurance and other fees derived from such patients who are not full private patients to be put into a fund which is used for the benefit of the house staff, but this fund is not usually disbursed in the form of direct payments.

To the old line practitioner this latter broad suggestion of payment to house officers by patients may seem a bit radical. He cannot but look on this arrangement as something that will be competitive for the patient's dollar, and he may not wish to turn the complete handling of his patient, both medical and financial, over to the house staff if there is any other way out. Perhaps there isn't, but it is likely that the suggestion will receive some debate.

Whether or not the arrangement proposed would mean any material loss to the practitioners in a community where hospitals are active would be a pertinent question. As a possible field, let us consider one community where there are hospitals employing 65 residents and 33 interns. There are 140 actual practitioners in the immediate area. In various connections they utilize the hospitals for their own patients. Would the addition of 65 or perhaps 98 potential hospital practitioners make a material difference to the 140 local practitioners who might have the need and the wish to obtain what fees they properly can from their normal group of patients?

This is an interesting thought, but will certainly bear discussion before it is adopted generally. Qualifications might well be in order before consideration of the application of this method.

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### CORPORATE PRACTICE

There is quite a bit of talk now about the financial advantages of corporate medicine. Already in four states this form of arrangement has been approved for any group of three or more doctors, and it is quite possible that this system of practice may extend widely in those states in which it becomes approved by state law.

A corporation gives the opportunity to secure the equivalent of social security benefits, a tax sheltered pension plan and various

fringe benefits. It does not involve any change in the professional activities of the participants, and it should always be under strictly medical control. The benefits to be derived may extend to all of the corporation's employees, nurses, administrative aides and so on under certain provisions.

This is an alternate plan for the Keogh Bill which is intended to provide eventually the same kind of savings, but this would give a broader benefit and perhaps a better financial return. It has even been suggested that one doctor might be incorporated, but this thought has not been pursued to a definitive ruling.

Incorporation will not affect the practice of medicine, nor the professional liability of the individual participant. The AMA has given approval to the principle, and model acts have been drawn by the AMA Law Department which might be used by those physicians who are concerned with promoting the legal blessing of incorporation in their own states.

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### UNFORTUNATE TITLES

Some of the titles of our medical papers are so involved and so long that they are hard to understand and certainly must play hob with the unfortunate cataloger's peace of mind. About this one, however, there can be little doubt, but it could make your blood run cold. The title; "The Urethral Catheter, a Two-Edged Sword", and this is a true one.

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### THE DOCTORS

by  
T. Hood

The honors which to kings we give  
to doctors also paid:—  
We're the kings subjects while we live—  
The doctors when we're dead.  
Tho' when in health and thoughtless mood  
We treat them oft with scoffing;  
Yet they returning ill with good,  
Relieve us from our coughing (coffin).  
At times they kill us to be sure  
In cases rather fickle—  
But when they've killed—they still can cure  
Their patients in a—Pickle.  
And when at last we needs must die—  
The doctors cannot save  
From Death—they will most kindly try,  
To snatch us from the grave.

# News



## DR. CHARLES WYATT IS HONORED FOR MEDICAL WORK; TRAY IS PRESENTED

Citing outstanding personal characteristics of sincerity, honesty, forthrightness, temerity and a willingness and desire to stand up for what is right, Greenville County doctors and guests paid tribute to Dr. Charles N. Wyatt at a dinner in his honor.

Dr. Wyatt, noted Greenville physician and surgeon, was honored for his tireless efforts on the part of organized medicine at the dinner meeting of the Greenville County Medical Society at the Poinsett Club. Several out-of-town doctors attended the dinner to add their support to the testimonial.

A handsomely engraved silver tray was presented to Dr. Wyatt by the society as a token of esteem.

Its inscription read:

Presented to Charles Newton Wyatt, M. D.; Physician-Gentleman; Colonel, Medical Corps A.V.S., 1942-46; Councilor of Fourth District, 1950-59; Chairman of Council, 1958-59; President of S. C. Medical Association, 1961-62, An outstanding and forthright leader in the highest tradition of our profession. . ."

Dr. John Webb was in charge of the dinner and termed Dr. Wyatt a "prophet who is with honor in his own country." He cited his tireless efforts on behalf of the medical profession and noted that as president of the state association "We could not have selected a man who would have given more."

Dr. Wyatt, speaking to the group prior to the presentation commented:

"I want to let you know that any honors which may be done to me tonight should be reversed. What has been done and accomplished over the years has been through help and assistance."

He added: "You have always stood steadfast—and it is I who should be honoring you."

Dr. Thomas Brockman, Dr. J. D. Guess, Dr. Lee Milferd of Clemson, Dr. Henry Ross, Dr. J. E. Crossland, were among doctors who added their words of praise for the noted medical man.

And at the end of the meeting, Dr. Wyatt, smiling, noted that "I am glad you came here to praise Caesar and not to bury him."

## A FIGHTER FOR BETTER MEDICINE

The medical profession of South Carolina honored itself and its desire for self-improvement the other night when it paid fitting tribute to Dr. Charles N. Wyatt of Greenville, president of the South Carolina Medical Association.

The occasion was a dinner given in his honor by the Greenville County Medical Society and attended by leading physicians from over the state. The token of appreciation was a handsome silver tray engraved with a part of the record of Dr. Wyatt's contributions to the profession outside of his extensive personal prac-



tice. We say "part" of the record because there wasn't room on the big tray for all of it and much of it couldn't be described anyway.

We first knew Dr. Wyatt when he was staff physician at Furman University. For years he was a familiar sight on the sidelines at Furman's football games, checking every player as he came off the field and closely scrutinizing every sprain or other sign of injury. He may not be as fast on his feet now as when he used to dash out on the field, but he has lost none of his energy and drive.

The public little knows it, but members of the medical profession, despite the natural professional jealousy which no group of human beings can escape, are constantly trying to improve their knowledge, exchanging ideas and indulging in searching self-criticism. When they meet for their technical sessions, in which case histories play a big part, no topic is taboo, no technique safe from questioning and no personality immune from criticism.

Seminars of doctors, both general practitioners and specialists, have become more frequent in recent years, ranging from local to statewide and regional meetings sometimes attracting scores of doctors from several states. Dr. Wyatt has been a prime mover in most of these and has led many of them. They are productive, else the doctors wouldn't take time to attend them in the numbers they do.

All of this is aimed at helping and encouraging the doctors to bring their knowledge up to date and to improve their skills to the end that the public is better served. This sort of activity has become almost an obsession, it seems, with Dr. Wyatt.

As president of the state medical group, he has traveled from one end of South Carolina to the other speaking to gatherings of doctors, nurses and laymen. He has sought to help the public understand better what it can and can't expect of its doctors and nurses and has exhorted his colleagues to greater zeal in their ministrations to the public.

And "Dr. Charlie" is not one to pull his punches, soft-pedal the unpleasant or obscure and excuse shortcomings.

We join in the salute to Dr. Wyatt and in doing so we express gratitude to the other dedicated members of his profession.

*Greenville News*  
Oct. 6, 1961

#### DR. WYATT ADDRESSES WOMAN'S AUXILIARY

Dr. Charles N. Wyatt addressed the September meeting of the Advisory Board of the Woman's Auxiliary in Charleston. Dr. Wyatt, who is a member of the AMA's Disaster Medical Care Committee, discussed the problems of medical care in a disaster such as a nuclear attack. He emphasized the need to get doctors to set up on the local level a training program for medical and lay personnel.

## AN ADDRESS TO THE WOMAN'S AUXILIARY

C. N. WYATT, M. D.

In attempting to try and find a subject that would be appropriate it seems to me that the two most pertinent matters at this time are—the participation of the medical profession in politics and the organization and promotion of emergency medical care in the crisis that face this country and the world today.

The participation of physicians in politics has been very negative until the past few years, when legislation on the state, and especially the national level, has forced the profession out of their political lethargy and demanded that they arouse not only members, but the American public to the danger facing this nation, for not only are these changes to the profession, but to the way of life that we have known and enjoyed all these years. Each year for the past three years or more, there have been introduced into the Congress of this Country some 300 to 500 bills that pertain in some respect to the practice of medicine. Out of these hundreds of bills only a comparative few have to be acted upon by the AMA in the interest of medicine. Contrary to the oft-stated remark "The AMA is opposed to everything" many of these bills are endorsed and supported by the AMA. However, all of these bills are studied as to their effect on medicine, and then a decision is made as to the action the AMA will take.

An article appearing in the *Denver Post* of 17 September, 1961, states that, and I quote:

"To fend off such plans, the AMA set up a lobby in Washington. Today, of a general Washington staff of 25, there are four registered lobbyists: a doctor, a lawyer and two former newspapermen.

"In moments of crisis in the past, the AMA has registered as many as eight lobbyists.

"Every day when Congress is in session, a staff member pores over the Congressional Record, noting bills of possible interest to doctors.

"Within three days the AMA has copies of those bills. They are analyzed by a lawyer. Six times a year the 12-doctor Committee on Legislative Action meets to advise the AMA's course on these bills.

"The AMA may do nothing. Or it may offer data. Or it may offer to testify for or against. In cases close to the AMA's heart—notably anything that smacks of "socialized medicine"—the lobbying staff goes to work.

"Member doctors in states are mobilized to work on public opinion at home, to wire their own congressmen, or to send messages to friends in Congress."

This same article stresses the fact that a large percent of the members of the House of Delegates (68) are 55 years of age or older, and that only 26% of the AMA members at large are in this age bracket. This is not, in my opinion, a power political machine, but indicates to me the lack of interest of the membership at large and the younger members in particular. I would, therefore, like to impress on you, the wives,

to see that your husbands take an interest, and maintain this interest, in the activities of their county society, their state association and the AMA.

This interest must be maintained for a solid front must be presented by the medical profession. I say this because of the days ahead. In the "Legislative Roundup" (published by communications section of the AMA) of September 8, 1961, the warning is sounded of a tough year ahead, and I quote:

"Tough Year Ahead—The medical profession and its allies in the battle against a compulsory social security approach to health care of the aged face a very tough year—There will be new and increased pressures during the election year of 1962 to enact the King bill (H.R. 4222) and only an all-out effort at the local and national level will defeat it—Portent of things to come were rife during the past week.

"Highest Priority—On September 1, President Kennedy promised to ask Congress to place the "highest priority" next year on an aged care program financed by the compulsory social security system. The President gave this assurance to Sen. Pat McNamara (D., Mich.) in a letter responding to a request from McNamara for such an expression — Kennedy told the Senator: "I wholeheartedly agree with your belief in the importance of this legislation to our nation. I assure you that I intend to recommend that this legislation be given the highest priority at the next session of Congress." — The President said he was "convinced that only the social security system can furnish satisfactory protection against the costs" that illnesses present to persons over 65 — In his letter of appeal to the President, McNamara explained that a strong presidential endorsement for an aged care bill "would serve to stimulate a prompt beginning to the planning" needed if the bill is to be enacted in 1962.

"Javits Jabs—On September 5, Sen. Jacob Javits (R., N. Y.) took the President and the Administration to task for failing to take action on H.R. 4222 or other legislation on health care of the aged during the First Session of the 87th Congress — Javits urged that the Congressional recess of 1961 be utilized for the purpose of meetings between Democrats and Republicans for the development of a compromise bill for medical care for the aged — Javits, who reasoned that Republican support would be necessary for any aged care bill, listed the following probable compromises: (1) cover all aged, not merely those on social security; (2) provide for preventive care — this to include physicians' services; (3) a plan whereby beneficiaries of voluntary health plans would be permitted to continue such plans as an alternative to accepting benefits under a Federal bill — Javits attacked the Kerr-Mills program as being entirely inadequate — He concluded by urging that the President give his entire support to a bill providing for medical aid to the aged and that the program be the first bill called up in January, 1962.

"Newspaper's View—Meanwhile, the *Wall Street Journal* carried a feature article by Staff Reporter John A. Grimes which began: "Chances are growing

that Congress next year will approve the hotly controversial plan for medical care for the aged via Social Security. Passage, if it comes, will not be easy. Because of the cost, backers may have to settle for a cut-down version of President Kennedy's present scheme to pay hospital, nursing-home and other bills for 14 million Americans aged 65 or more."

"Summing Up—New pressures will arise for passage of H.R. 4222 or bills similar to it, and political writers will predict passage of a medical aid plan under social security — But remember this: There were tremendous pressures for passage of the Forand bill and several newspapers predicted its enactment— The Forand bill failed to pass, and the King bill will also be defeated if the medical profession and its allies wage a vigorous and intelligent fight."

And I may state that we have some very strong allies in this fight such as Chamber of Commerce of U. S., Farmers' Bureau, National Association of Manufacturers, and others.

There are other forms of legislation affecting the medical profession such as scholarships for persons studying medicine — health insurance for retired federal employees — U. S. Commission on Aging — establishment of a military medical college — factory inspection and drug amendments — compulsory coverage of physicians under Social Security — and "Coon-Skin Cap" Kefauver's bill for Licensing of Prescription Drug Manufacturers — (S-3677) and many, many others.

Is there any wonder that there is alarm within the ranks of organized medicine about the reduction of application to study medicine?

This could go on and on, but I wish to make a few remarks about the Emergency Medical Care or Disaster Medical Care. Having just returned from a meeting of the Committee on Disaster Medical Care of the AMA, there are certain things that are alarming concerning this phase of American preparedness. As you know, there has been a change in the so-called Civil Defense set-up in that the President in an appearance before Congress on 25 May, 1961, stressed the justification of Civil Defense as needed insurance for the country against the hazard of an atomic war. (This could happen by accident or by an enemy's miscalculation or insanity.) He further reorganized the set-up by placing the defense of the civilian population under the care of the Department of Defense. He stated that a nation-wide program to provide fallout shelters in new and existing buildings will be started, and that three times as much money (294 million) would be sought for the promotion of this plan. Also, private citizens and local and state governments will have to share the cost."

The AMA recommended a shelter program as far back as 1957 and has been urging the government to take the lead in this matter, over the years. To no avail. The same is true of gas masks. (It is known by Intelligence that the Russians have and are prepared to wage both bacterial and chemical warfare.)

Surely the Civil Defense is a responsibility of the



government, but certain responsibilities befall the individual as well. The responsibility of the medical care is certainly a responsibility of the medical profession and it is its duty to see that there is organization and training not only among the physicians, which is sadly lacking, but among the allied medical personnel—dentist, vet, nurse, pharmacist, technician. The people are looking to the doctors for leadership, and this leadership *must* be provided through leadership, instruction and organization.

The AMA through its Council on Security and its Committee on Disaster Medical Care has long been advocating preparation along these lines. Close liaison has been had with the old office of CD and the PHS and certain accomplishments have been made. Among them is the distribution of the 200-bed Emergency Hospitals, which have been distributed to every state in the union, (S. C. has 24), a plan of survival that has been written in each state, Civil Defense Directors of states, and last but not least, a Self Help Survival Kit which is in the process of being distributed in the near future. (This is to have trial at Brooklyn, Battle Creek and Alameda, California during the month of October.)

This consists of lectures in control of bleeding, sanitation, hygiene, care and feeding of babies, and has full instructions for the instructor and a projector and slides. It is written so that a person of a 9th grade intelligence can understand. It is planned that 100,000 will be trained the first year (1962), 300,00 the next year (1963) and a million by 1964. Other means of promoting Disaster Emergency Care are advocating tetanus toxoid and keeping this up-to-date, blood banks, typing of blood, etc.

C. N. Wyatt, M. D.

### Dr. Samuel D. Campbell

Dr. Samuel D. Campbell, the oldest member of the Greenville Medical Society, was recently featured in a newspaper article with his reminiscences of fifty years of medical practice. Dr. Campbell received his medical degree from the University of Georgia in 1902. He practiced in Piedmont from 1909 until 1952 when he moved to Greenville where he maintains a small office in his home.

Besides the great difference in transportation, both roads and vehicles, Dr. Campbell recalled the lack of hospitals in the early years of his practice and the doctor's responsibility for preparing and supplying much of the medicine he prescribed. Dr. Campbell was also called upon to perform dental services. He has made over 6,000 deliveries and remembers vividly the time he brought four babies into the world within a 24 hour period. Dr. Campbell now serves as mill doctor for the Piedmont Plant of J. P. Stevens Company, Inc. and keeps office hours at the plant for an hour daily.

Dr. Peter Gazes, assistant professor of medicine (cardiology) at the Medical College of South Carolina spoke on "Bedside Clues in the Diagnosis of Cardiovascular Disease" at the First Charlotte Postgraduate Seminar at Presbyterian Hospital in Charlotte on October 18.

Appointment of Dr. John W. Berg as editor of "Cancer — A Journal of the American Cancer Society," a publication devoted to clinical and basic research, was announced recently by the American Cancer Society.

Dr. Louis Palles has been certified as a Diplomate of the American Board of Obstetrics and Gynecology, an organization to encourage study in the two fields. Dr. Palles a graduate of Davidson College and University of Pennsylvania Medical School is in practice in Florence with Dr. Harry Temple.

Dr. John M. Ervin, Jr. announces the association of Dr. J. K. Newsom in the general practice of medicine. Ervin-Newsom Clinic, 148 2nd Street, Cheraw.

Dr. Newsom did his pre-medical work at the Citadel, received his M. D. degree from Tulane Medical School, and recently completed his internship at McLeod Infirmary.

### ROPER GETS FOURTH ARTERY STUDY GRANT

The fourth research grant by the John A. Hartford Foundation, Inc. of New York to Roper Hospital has been announced by Ralph W. Burger, president of the foundation, and C. A. Robb, administrator of Roper Hospital.

The new grant provides support of \$160,297.00 to cover a project period of three years (July, 1961 to June, 1964). An additional \$10,000 is being made available for special equipment which will be needed in the new studies.

With the present grant, Roper Hospital has received a total of \$392,633.00 from the Hartford Foundation. The first grant was received in 1956. The present funds are being used for the investigation of diseases of the arteries and the development of new diagnostic methods and new treatments of arterial obliterative diseases.

The program is under the direction of Dr. J. Manly Stallworth, director of the Vascular Laboratory and assistant professor of surgery at the Medical College of South Carolina. The studies are being accomplished cooperatively at Roper Hospital and the Medical College.

The conclusions drawn from laboratory studies under earlier grants are being used in the medical and surgical treatment of patients. Also the latest principles of diagnosis and treatment are being used for teaching medical and nursing personnel.



## Woman's Auxiliary

Meeting in Charleston on September 22, board members of the Auxiliary to the S. C. Medical Association voted to support the 16th annual national essay contest sponsored by the Association of American Physicians and Surgeons. Greenville physician, Dr. Thomas Parker, is state chairman for the contest.

Also at the morning session, auxiliary members heard a report from Civil Defense committee chairman, Mrs. Ralph B. Baker, Newberry. Mrs. Baker called for members to work toward the goal of informing and training families, adding that such training would be the determining factor in survival of atomic war.

Mrs. John T. Cuttino, Charleston, president of the auxiliary, termed civil defense as "one of our gravest concerns."

Two committees were appointed during the morning board meeting. Elected to a convention committee for the annual 1962 meeting at Myrtle Beach were Mrs. L. C. Martin, Charleston, chairman; Mrs. Ralph Baker, Newberry and Mrs. R. G. Slocum, Columbia.

Elected to a nominating committee for the current year were Mrs. George Smith, Florence, chairman; Mrs. George Orvin, Charleston and Mrs. Robert Thompson, Union.

Mrs. Cuttino announced that all auxiliary members are invited to attend the annual Southern Medical Association convention in Dallas, Texas November 6 through 9.

A special guest at the session was Dr. J. I. Waring, Charleston, public relations chairman for the Medical Association. Dr. Waring spoke to the group on the state-wide speakers bureau, asking auxiliary members' support of the bureau's program in their communities.

Guest speaker at the luncheon was Dr. Charles N. Wyatt, Greenville, president of the S. C. Medical Association. Dr. Wyatt discussed the participation of the medical profession in politics and the organization and promotion of emergency medical care in the crisis that faces this country and the world today.

## COLUMBIA MEDICAL SOCIETY

The Columbia Medical Society will hold its Annual Meeting for the Election of Officers at the Hotel Columbia, Monday, December 11, 1961. Present officers are: Dr. Weston C. Cook, President; Dr. Joe E. Freed, Vice-President; Dr. James T. Green, President-Elect; Dr. Charles R. Sloan, Secretary; Dr. Waitus O. Tanner, Treasurer; and Dr. P. F. LaBorde, Editor of THE RECORDER.

Dr. Harold E. Jervey, 1515 Bull Street, Columbia has been appointed Secretary-Treasurer of the Federation of State Medical Boards and Editor of the Federation Bulletin.

## DR. LETA J. WHITE IN AFRICA

Dr. Leta J. White, former part-time clinician of the Cherokee County Health Department, has resigned in order to serve in the Baptist Medical Center in Ghana, West Africa. She was to leave October 2 and will return April 1, 1962.

Dr. Pickens K. Moyd, a native of Greenwood, has opened his office for the practice of general surgery in Hartsville. Dr. Moyd is a graduate of the Medical College of South Carolina and took his internship and residency training at the Medical College of Virginia Hospitals in Richmond.

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# Deaths

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## DR. F. E. KREDEL

Dr. Frederick E. Kredel of 60 Montague Street, Charleston, S. C. died October 8.

Dr. Kredel formerly was head of the department of surgery at the Medical College of South Carolina. He came to Charleston in 1937 from the Chicago Clinic. He was a graduate of Johns Hopkins University. He was active in the American College of Surgeons and held several offices in that organization.

Dr. Kredel's last project was extensive research into fat embolisms. He specialized, however, in abdominal surgery.

A former president of the Charleston County Medical Society, Dr. Kredel had a narrow brush with death in early January, 1957. He entered the Medical College Hospital after recurrent attacks of gastrointestinal upset and suffered a serious rupture of the aorta, the heart's major blood vessel. A staff surgeon

at the hospital performed an emergency operation on Dr. Kredel and removed the ruptured section of the aorta. The removed section was replaced by a plastic vessel. The delicate operation took five hours, and one of the attending physicians said afterwards that the staff surgeon's skill very likely saved Dr. Kredel's life.

In April of 1953, Dr. Kredel was honored by the American Cancer Society. He was awarded a medal for being the "outstanding contributor to the state's 1952 cancer program."

During his tenure as head of the Medical College's Department of Surgery, Dr. Kredel performed a number of rare operations. He received national recognition for successful operations on "stroke" victims who were paralyzed from lack of blood flowing to the brain.

On March 23, 1956, a portrait of Dr. Kredel was presented to the Medical College of South Carolina by Dr. Alton G. Brown of Rock Hill. Dr. Brown made

the presentation on behalf of surgery residents trained under Dr. Kredel, who was the first full-time professor of surgery at the Medical College Hospital.

**DR. E. A. SIMMONS**

Dr. Elbert A. Simmons, 80-year-old Timmons ville physician, died October 6 of injuries received in an automobile accident.

Dr. Simmons attended Cokesbury Conference School and received his M. D. degree from the University of Louisville in 1909, starting his practice in Timmons ville the same year.

Dr. Simmons practiced medicine for 42 years in Timmons ville and 10 in Hemingway. He served as president of the Florence Medical Association and also as secretary-treasurer of the Williamsburg Medical Association.

**DR. HERBERT E. VAUGHAN**

Dr. Herbert E. Vaughan, 69, retired physician of South Weston St., died July 30 after three months illness.

He was a native of Timmons ville and had practiced

medicine in Fountain Inn for the past 20 years.

Before coming to Fountain Inn, Dr. Vaughan had practiced at Reidville in Spartanburg County. He was a graduate of the University of South Carolina and the South Carolina Medical College in the class of 1911.

**DR. J. CLYDE MOORE**

Dr. J. C. Moore practicing physician of the Duncan community for 50 years, died at his home following three years' illness.

He was born and reared at Lake City and was a graduate of the Medical College of South Carolina, class of 1901. He did post-graduate work at Polyclinic Institute in New York. He was an honorary member of the American Medical Association and the S. C. Medical Association and was an active member of Spartanburg County Medical Society.

He was the first practicing physician for Pacific Mills at Lyman and for a number of years was surgeon for the Piedmont and Northern Railway and was physician for Duke Power Plant at Duncan.

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# Announcements

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**SYMPOSIUM ON  
USE AND ABUSE OF ANTIBIOTICS**

A Circuit Course of the Division of Postgraduate Education of the Medical College of South Carolina. Under the auspices of the Third District Medical Society.

GREENWOOD, SOUTH CAROLINA

Self Memorial Hospital

December 5, 1961 — 6:00 - 10:00 P. M.

Dinner — 7:00 to 8:00 P. M.

Faculty:

Louis Jervcy, M. D.

Margaret Jenkins, M. D.

Louie B. Jenkins, M. D.

R.S.V.P.

Dr. Paul Garrison

Greenwood

South Carolina

**COURSE IN LARYNGOLOGY AND  
BRONCHESOPHAGOLOGY**

April 2 to 14, 1962

The Department of Otolaryngology, University of Illinois College of Medicine, will conduct a post-graduate course in Laryngology and Bronchoesophagology from April 2 through 14, 1962, under the direction of Paul H. Holinger, M. D.

Registration will be limited to fifteen physicians who will receive instruction by means of animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures.

Interested registrants will please write directly to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

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**PAN-AMERICAN MEDICAL CONGRESS**

The VIII biennial Congress of the Pan-American Medical Women's Alliance will meet in Manizales, Colombia, South America, February 17-24, 1962. Women physicians of North, Central and South America are cordially invited to attend this Congress.

A pre and post Congress tour has been arranged from New Orleans, leaving February 7, 1962 and returning March 11, 1962. For further information for those making the tour, please write to Eva F. Dodge, M. D., 2124 West 11th Street, Little Rock, Arkansas.

# Civil Defense

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## CIVIL DEFENSE

The U. S. Public Health Service has announced plans to train 60 million Americans in basic medical procedures that would be of value in a national disaster, such as an all-out nuclear attack.

Jerrold M. Michael, assistant chief of the Health Mobilization Division of PHS, said the program, called "Medical Self-Help Training," will begin this fall.

The program is designed to give one person in each family 12-16 hour courses in such basic medical skills as radiation fallout protection, hygiene, sanitation, treatment of fractures and common infectious or epidemic diseases, infant and child care and even emergency delivery of babies.

Although sponsored by PHS, the program will be carried out by state Civil Defense directors and state health departments.

This unique training program is keyed to prepare the American people to care for themselves where necessary by their own ingenuity and with the resources they may have on hand at the moment of disaster.

A key figure in the training program will be the practicing physician. He will be asked to advise and provide the professional leadership so necessary for the successful accomplishment of this training program.

To assist physicians and to do the actual instruction

in most instances, the support of all other health professionals, allied health workers and individuals with previous experience in this type of teaching is necessary.

The Medical Self-Help Training will teach persons confidence in their ability to survive, along with the skills to make them self-reliant until they can obtain a physician's services.

During October, November and December three Medical Self-Help Workshops will be held in Brooklyn, N. Y., Alameda, Calif., and Battle Creek, Mich. Some 100 professional health personnel and civil defense and education leaders will attend each workshop for orientation in the proposed program.

It has been proposed that within each state a Medical Self-Help Committee be established to advise civil defense directors and to provide professional leadership to the program. It is recommended that the committee consist of the State Civil Defense Director, State Health Officer, State Chief School Officer and representation from the State Medical Society.

From inception of the research project, the American Medical Association, through its Council on National Security and Committee on Disaster Medical Care, provided guidance, counsel and review of all plans, actions and materials concerned with the medical self-help program.

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## HEALTH MOBILIZATION AND DISASTER MEDICAL CARE

The threat of nuclear warfare with its capability of mass destruction of huge elements of our nation has imposed on the medical and allied health professions of this country a tremendous responsibility in the nation's efforts to survive. Never before in history has the productive individual assumed such importance as he is expected to assume in modern warfare. The saving of lives particularly of those who can contribute to the survival efforts, has become extremely important and the medical and allied professions must assume a far larger role in our war potential than ever before. They face their greatest challenge. In view of the critically important role that organized medicine in all its phases must play, prior, during and subsequent to a mass attack on the United States, a national plan, far reaching in scope, adequate in con-

cept, permanent and flexible in nature, and wholeheartedly supported by the medical profession, is an absolute incontrovertible and immediate necessity if this country is to survive such an attack—and live to fight back.

The role of the medical profession is to prepare its members to cope effectively with the results of a mass attack on the United States and to assist actively in preparing the nation to withstand such an attack. In the event of a mass attack on this country, the role of the medical profession is to provide to the nation the highest quality and best organized remedial and preventive medical services possible, in order that maximum numbers of physically and mentally fit survivors imbued with high morale and a courageous spirit are and will become available to assume their share of responsibility in the ensuing national recovery efforts and to participate in concurrent and subsequent combat operations. It is expected



that professional medical associations will actively encourage and provide the necessary leadership in supporting such approved professional and technical training programs as may be designed to ensure the medical preparedness of the state and nation for an all-out

war. It is further expected that individual physicians will assist, advise, and conduct training sessions when requested, demonstrate their assumption of leadership in the field of disaster medicine and ensure adequate and proper instruction of the general public.



## BLUE CROSS . . . BLUE SHIELD



### A WORD TO DOCTORS— FROM A DOCTOR

By R. L. Schaeffer, M. D.

Thirty or more years ago, a group of low income teachers, in Texas, realized that they needed some plan of prepaid hospital and medical care.

The idea spread rapidly, and today almost 57 million people in the United States and Canada are covered by Blue Cross, for hospital bills. And Blue Shield, for doctor bills, has 47,000,000 members.

These prepaid plans spread rapidly because there was no other plan or any kind of insurance to provide the same or as great benefits. Blue Cross and Blue Shield plans believe that health care financing, organized as a community service and *not* for profit, is in the best interest of subscribers, doctors, hospitals and the general public.

The goal of these plans is *service* rather than profit. The concern is *protection*, rather than cost. Should Blue Cross and Blue Shield ever fail, in my opinion, there will be Government control of medicine.

Hospitals and the doctors can prevent their failure by curtailing the costs of hospital and medical care by adhering to the following *Don'ts*:

1. DON'T put a patient in a hospital bed just because he wants to be there or because it is more convenient for the doctor to have him there.
2. DON'T order expensive services that are not really needed just because the patient thinks he needs them and they won't do any harm—and, besides, he is covered by insurance.
3. DON'T order a patient admitted on Saturday when nothing is going to be done for him until the doctor visits him Monday. In this respect, pre-admission laboratory testing would be very helpful.
4. DON'T have a patient put in a hospital bed purely for diagnostic purposes that can be accomplished as easily or better in the out-patient department or the office of a specialist.
5. DON'T hold up a patient's discharge because of his family's convenience or for some other relatively unimportant reason.

It is quite easy, of course, to tell a doctor what *not*

to do. There are pressures upon him from his patients. The doctor is in business for himself and unless his patients like him they will choose another physician. But until better public attitudes are adopted by many *doctors* we are not even going to get our feet wet in reducing or holding the line in the costs of health care.

It requires a strong professional conscience on the part of the physician to resist pressures by the patient.

Hospital administrators must rely on you to forestall unreasonable demands. Explain to the patient that, either through ignorance or indifference, he is acting against his own ultimate self-interest by raising today's hospital costs even higher.

Point out to him that by taking up a hospital bed unnecessarily he may prevent the admission of someone who is critically ill, and that some day the tables might be turned on him.

Appeal to his pride by pointing out that by calling upon a hospital for unnecessary service, he is really asking someone else to shoulder his bills, since hospital and insurance rates are based on over-all expenditures.

A progressive step by Blue Cross has been the introduction of its Co-Pay Comprehensive contract, based on the co-insurance principle. (I know something about these things because I serve on a Blue Cross Board of Directors.)

This agreement with the subscriber, also directed in part toward eliminating unwise hospitalization, offers the highest in in-patient benefits as well as out-patient diagnostic service but *does* require hospitalized patients to pay a modest daily payment out of their own pockets. There is nothing so effective in cutting down unneeded occupancy of hospital beds as placing some of the financial responsibility on the patient.

The function of the hospital in the community is, of course, to take care of sick people when they are sick enough to require hospital care. Hospitals are primarily service institutions and the ace in the hole that hospitals have is that there always will be hos-

pitals. They may be financed or organized in some other way than now, but they will always be here.

Blue Cross, however, is a secondary community service organization solely for the purpose of perfecting the voluntary method of financing hospital care.

Blue Cross is not an insurance company. It uses some of the averaging principles of insurance but it is not insurance as such. Its purpose is still what it originally was—to provide a voluntary means for a whole community to finance hospital care for the whole community. The fact that we have not yet reached the ideal or the ultimate does not invalidate the objective.

We should not run away from the fact that Blue Cross is "social" insurance. Social insurance is a nasty word in many circles, but we cannot run away from it because it is the nature of the problem.

## **ANNUAL REPORT**

**1960-1961**

### **CHILD EMOTIONAL AND MENTAL DEVELOPMENT COMMITTEE**

**KENNETH AYCOCK, M. D.**

In its first year of conception the Child Emotional and Mental Development Committee thought that they could best serve the South Carolina pediatricians by acquainting them with the large number of both emotionally disturbed and mentally retarded children, and with letting them know the facilities available in South Carolina for the treatment of the emotionally disturbed and mentally retarded child.

#### **I. EMOTIONALLY DISTURBED CHILD.**

The facilities available for the treatment of the emotionally disturbed child are largely through the South Carolina Mental Health Commission. Prior to 1961, there were (5) clinics operated by the State Mental Health Commission. The General Assembly in 1961 approved the Community Mental Health Services Act which allows for: (1) The participation of all counties in mental health services; (2) Local control and initiation of services with state control; (3) State Grants-in-Aid on a 50-50 basis for community services, and (4) The creation of Area Mental Health Boards with administrative responsibility for community mental health services in multi-county units. For the purpose of extending services to all counties, the state has tentatively been divided into 10 areas, on a population basis, each with its own clinic. Six of these clinics are now in operation:

Greenville County Mental Health Clinic  
600 County Office Building  
Greenville, South Carolina  
Dr. Iverson O. Brownell, Director  
Charleston County Mental Health Clinic  
275 Calhoun Street  
Charleston, South Carolina  
Dr. R. Ramsey Mellette, Jr., Director  
Spartanburg County Mental Health Clinic  
149 E. Wood Street

The object of all of us—doctors, hospitals and Blue Cross—is not to preserve hospitals and Blue Cross. It is to promote the health of the people.

There are factors which affect the cost of medical care that cannot be controlled by Blue Cross, Blue Shield, hospitals or doctors. One of these is *medical progress*. New techniques, new methods, new equipment, and the use of special services—all the services the public wants and demands—have to be provided within reason. Blue Cross and Blue Shield want to provide them and the subscriber ultimately has to pay for them.

May I ask the hospital and the doctors not to abuse Blue Cross and Blue Shield so that these plans can continue providing all the hospital and medical services at a cost which the public can afford!

Spartanburg, South Carolina  
Dr. Samuel R. Kilgore, Director  
Richland County Mental Health Clinic  
1845 Assembly Street  
Columbia, South Carolina  
Dr. James E. Gilbert, Director  
Darlington-Florence County Mental Health Clinic  
P. O. Box 1568, Dr. George W. Houck, Director  
York-Chester-Lancaster Mental Health Center  
1051 Oakland Avenue  
Rock Hill, South Carolina  
Dr. W. G. Morehouse, Director

It is expected that 2 new clinics will open within the coming year, one in Greenwood and the other in Anderson. It is hoped that the remaining two clinics allocated for Aiken and Horry or Georgetown county will be forthcoming within the near future.

As to the out-patient care of the emotionally disturbed individuals seen in these clinics, the South Carolina Mental Health Commission has broken down their statistics into those persons below and those persons above 18 years of age. In 1958, there were a total of 493 patients under 18 years of age whose treatment was terminated in the 5 clinics then in operation. In 1959, there was a total of 521 children whose treatment was terminated, and in 1960 there was a total of 491 children whose treatment was terminated in the 5 state clinics. Although there does not seem to be much, if any, increase in the total patient number over the three year period, it is of interest to note that in all three years those patients under 18 years of age represented approximately one-half of the total patients terminated.

Another service provided by the South Carolina Mental Health Commission is the mental health education unit. Much fine work is being done by this division, and they are more than happy to extend their services to anyone interested.

As of this date, there are no facilities available for the residential treatment of emotionally disturbed children in South Carolina. However, there are psy-

chiatric units at several hospitals throughout the State where emotionally disturbed children may be hospitalized. At the Medical College Hospital there is a close working relationship between the department of psychiatry and department of pediatrics and the local Mental Health Clinic. Of the total 491 terminated patients under 18 years of age seen in all the mental health clinics in South Carolina, 25 were institutionalized.

The type of service rendered to those terminated patients of 1960 under 18 years of age is given in table below:

Diagnosis and Treatment .....	125
Diagnosis only .....	196
Psychological Testing Only .....	35
Other Service .....	131

The source of referral of those terminated patients of 1960 under 18 years of age was as follows:

	Sex		Age Group		
	Total	Male	Female	Under 18 years	18 yrs. & over
Schools	91	61	30	80	11
Physicians 36.1% Health & Welfare	398	163	235	165	233
Agencies	157	70	87	77	80
Self	152	56	96	9	143
Family	120	76	44	89	31
Courts	60	40	20	34	26
Ministers	30	18	12	8	22
State Institutions	12	3	9	4	8
Other	81	32	49	25	56
Total	1,101	519	582	491	610

H. MENTALLY RETARDED CHILD

Various studies in the United States show that 3% of the population is mentally retarded. A further breakdown shows out of each 1,000 persons, 30 are mentally retarded—25 of whom are educable, 4 trainable, and 1 totally dependent. Based on these studies, it is assumed that South Carolina, with an estimated population of 409,469 under 7 years of age, has 12,284 mentally retarded children in this age group.

Mental retardation is by far the most crippling condition which affects our nation's children. Of each 100,000 persons in our population, an estimated 200 are blind, 300 are permanently crippled by polio, 350 by cerebral palsy and 700 by rheumatic heart conditions but 3,000 are mentally retarded.

There are at present in South Carolina 2 centers for the evaluation of the mentally retarded child: The Child Development Clinic, Pediatric Department, South Carolina Medical College, and The Evaluation Clinic for Mentally Retarded Children located at 1515 Bull Street, Columbia, and under the administration of the Maternal and Child Health Division of the South Carolina State Board of Health. Both have long waiting lists with no apparent hope for immediate relief of this condition.

The Child Development Clinic in Charleston ac-

cepts patients on referral of licensed medical doctors for two indications, namely: (1) Diagnosis of cases who are not functioning adequately in comparison with their peers, and in whom the reason for the inadequate function is not entirely clear; (2) Children who are not functioning adequately because of either an established diagnosis of one of the causes of mental retardation, or because of obvious emotional problems, the primary purpose of the referral being further evaluation and counselling regarding medical, psychiatric, educational, or custodial plans with parents who have difficulty accepting the obvious diagnosis.

The Evaluation Clinic for Mentally Retarded Children in Columbia has been in operation since May, 1961, and is set up for the purpose of comprehensive diagnostic study and evaluation of any child under 7 years of age whose development reflects some degree of mental retardation.

In addition to the 2 clinics mentioned, other facilities for the mentally retarded child in South Carolina include wonderful help and guidance for the parents of these unfortunate children through the various parent organizations for the mentally retarded. There are a total of 9 such organizations in the state:

- AIKEN Chapter  
Mrs. J. M. Weibel  
1215 Lake Avenue  
North Augusta, S. C.
- EDISTO Chapter  
(Orangeburg, Bamberg, Calhoun)  
Mrs. Harry Arrant  
Box 181  
Orangeburg, S. C.
- CHARLESTON Chapter  
Mrs. Arthur Ravenel, Jr.  
P. O. Box 3141, St. Andrews Br.
- COLUMBIA Chapter (Richland)  
Mrs. Julius Green  
4144 Shorebrook Drive
- GEORGETOWN Chapter  
Dr. John T. Assey, Jr.  
122 Orange Street
- GREENWOOD Chapter  
Mrs. T. H. McNeill  
317 W. Cambridge Avenue
- MARLBORO Chapter  
Mr. Brantz Mayer  
Oakdale Court  
Bennettsville, S. C.
- SUMTER Chapter  
Mr. Robert Newton  
Sumter County Mental Health Project
- GREENVILLE Chapter  
Mrs. Ray L. Hayes  
Taylors, S. C.

The extent to which the needs of the mentally retarded are presently met in this state can be divided into residential facilities, and public educational services. The residential facilities include Whitten Village for the white with a population of 2,273, and Pineland for the colored, with a population of 404.



Both schools are filled over their expected quota and have long waiting lists. The services offered through the Public Education Department are 137 and 53 special classes in public schools for the educable retarded white child and negro child, respectively.

There are 7 special classes for the trainable retarded white child, 1 each in Charleston, Columbia, Georgetown, Greenville, Sumter, 2 in Aiken, and 1 special class for the trainable retarded negro child in Georgetown.

It is hoped that there will be the addition of one special class for the educable retarded colored child in Columbia this fall.

Hope for the crying needs of the mentally retarded child in this state hangs on the work of the legislative committee of Mental Health and Mental Institutions whose Chairman is Senator Earle E. Morris. It is hoped that with the coming legislative year means will be provided for additional special educational classes, the establishment of local special classes for the trainable retarded child, and within the not too distant future, the development of a retarded children's school and rehabilitation center, with the addition of increased housing space for institutionalized patients.

## IMITATION SPECIALTY BOARDS

(Reprinted with permission from the May 1961 issue of the *Archives of Environmental Health*.)

It is the ironic fate of many articles of excellence that they stimulate the production of imitations. Some imitations have real merit and value; others are of questionable worth. Imitation specialty boards present some interesting phenomena, particularly in relation to the causes and effects of their existence.

In the present era of status symbols it is clear that certification by a specialty board represents a fine example of the genre. Since symbolism is involved it is the appearance that is important. A well-contrived imitation may have the same value as the genuine thing.

The scandalous proliferation of medical diploma mills during the latter part of the 19th century and their disastrous effects on medical education are familiar history. The American Specialty Boards, established for the purpose of raising standards of medical practice, may now be facing a similar threat. The imitators are at work.

Presumably it is not illegal for any group of individuals to band together and call themselves an American Board of whatever they may choose. Such groups will probably be careful not to adopt the name of a previously existing Board, but there may be close resemblance. If someone wanted to organize an American Board of Medicine or an American Board of General Surgery it is unlikely that very much could be done to prevent it. The general public and perhaps some physicians might not recognize that these Boards were not of the same type as the American Board of Internal Medicine or the American Board of Surgery.

## RECOMMENDATIONS BY THE COMMITTEE

1. The committee strongly urges each pediatrician who has a mentally retarded child in his care, to encourage the parents of these mentally retarded children first to have an evaluation at one of the clinics mentioned and, secondly, get in touch with a local chapter of the Association for Retarded Children. If there is no local chapter, then much help can be given both the parent and the child by contacting the South Carolina Association for Retarded Children.
2. Acknowledge the splendid work accomplished by the Legislative Committee of Mental Health and Mental Institutions under the directorship of Senator Earle E. Morris.
3. The committee would like the chapter to recognize and report the work being done by the study committee on emotionally disturbed children of the South Carolina Mental Health Association with regard to obtaining a resident treatment center.
4. The committee would like the secretary to write the South Carolina Mental Health Association to send a copy of the new directory of Mental Health Resources in South Carolina to all pediatricians.

How many people know about the Advisory Board for Medical Specialties and its role in the certification of specialists?

In the eyes of many persons the terms Occupational Medicine and Industrial Hygiene are synonymous. The certification of physicians as specialists by an American Board of Industrial Hygiene can hardly be welcomed with joy by those physicians who have been certified as specialists in Occupational Medicine by the American Board of Preventive Medicine.

Why would a physician wish to be certified by an American Board of Industrial Hygiene when he has available to him certification in occupational medicine by the American Board of Preventive Medicine? One possible answer comes readily to mind: He was not able to meet the high standards of professional achievement required by the latter. If this be true it logically follows that some physicians may be willing to settle for a second-class type of certification rather than none at all. In the eyes of some this may give the second-class diplomate the status he seeks, but to his more sophisticated colleagues he has identified himself as a second-class specialist.

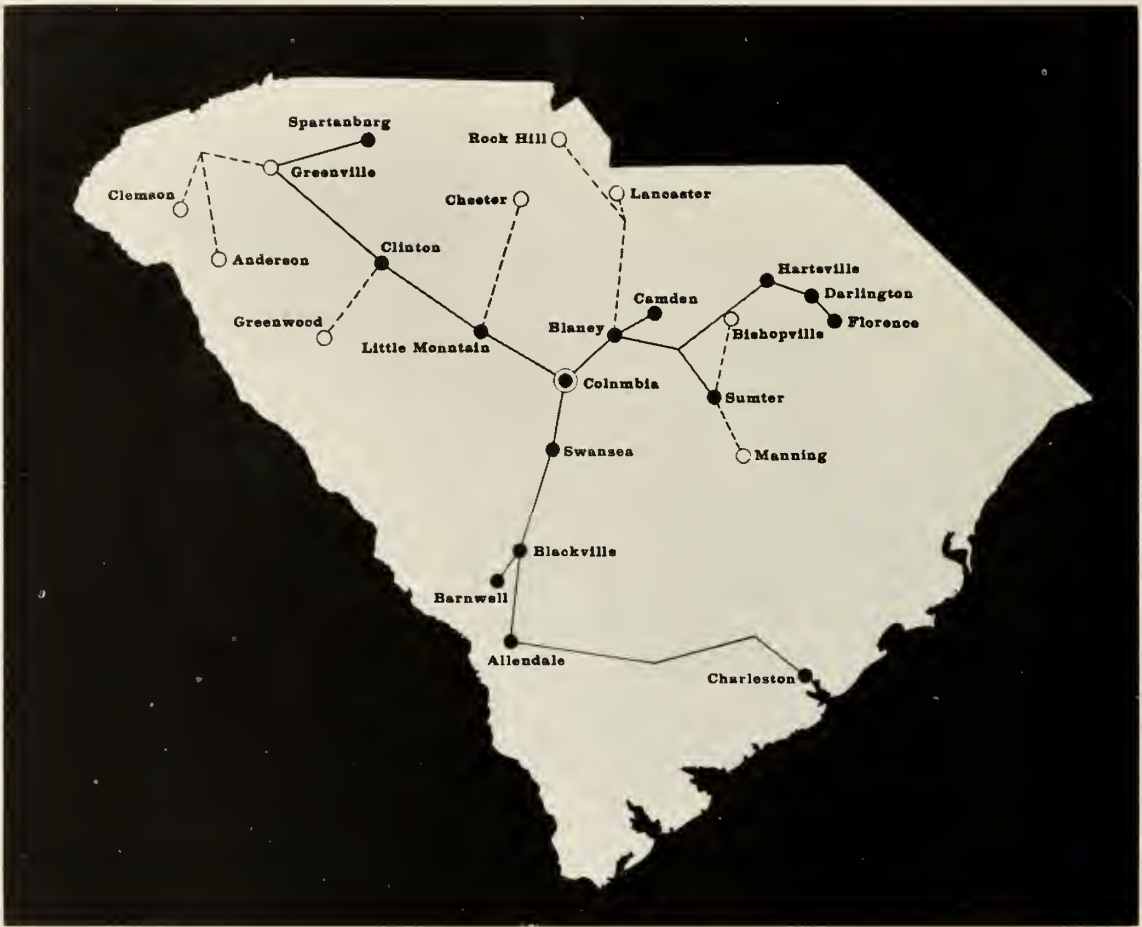
If acceptance of an inferior type of specialty certification were purely a personal matter, it would obviously be highly improper for an outsider to criticize or interfere. But just as the existence of inferior medical schools formerly threatened the quality of medical education in the entire country, so an inferior specialty board threatens the quality of medical practice. If a cheap imitation will do, why bother with the genuine article?

What has been said above is meant to apply only to physicians. The nonmedical industrial hygienists are

to be commended for their efforts to elevate their own professional standards. Possibly their objective might have been achieved by creating a Fellowship category in their professional society. Better still, they might have striven for recognition through the existing American Board of Preventive Medicine. Since physi-

cists are certified by the American Board of Radiology it is quite possible that biochemists, toxicologists, and others may be able to work out a similar arrangement with the American Board of Preventive Medicine.

Leonard J. Goldwater, M. D.  
New York



WHITE DOTS INDICATE CITIES THAT JOINED THE NETWORK THIS SEPTEMBER.

## INAUGURATION OF MEDICAL TV IN SOUTH CAROLINA

DALE GROOM, M. D., CHAIRMAN,  
COMMITTEE ON POSTGRADUATE  
EDUCATION, MEDICAL COLLEGE  
OF SOUTH CAROLINA

On November 30, 1961, the first of a series of medical television programs directed to physicians of South Carolina will be presented over the State's closed circuit Educational Television system. The network, (Fig.1), now linking 62 schools in 21 counties with its central studios in Columbia, is the first state-

wide educational TV circuit in the United States. Likewise a "first" is this application of the facilities for postgraduate medical education.

The programs will consist of 1 hour symposia on various medical subjects of interest to practicing physicians, and will be produced by faculty members of

the Medical College of South Carolina in collaboration with the ETV staff in Columbia. Each symposium will be followed by a 30 minute question and answer period during which viewing doctors may telephone questions in to the panel and thus participate themselves in this new type of state-wide medical meeting.

Because the programs are transmitted over a closed circuit system they cannot be seen by the public on home TV receivers. Rather, they will be viewed by groups of physicians who go at prearranged hours to any of the schools listed below. This is the same Educational Television circuit which is used during school hours to teach thousands of students courses ranging from algebra to science and history, which

grew from a one-city network in 1959 to its present state-wide proportions and which, within a year or two, will probably link every county in South Carolina. Appropriation by the State legislature for ETV for the 1961-62 school year is \$798,600. This medical application of the vast system is, essentially, an extra dividend in that it utilizes existing facilities during evening hours.

Initially, these symposia will be presented from 8:00-9:30 P. M. on the schedule below. Each will be recorded on TV tape and shown over the same network the following evening for physicians who were unable to attend the live performance.

## **"THE DIFFERENTIAL DIAGNOSIS OF CHEST PAIN"**

Thursday, November 30

Friday, December 1

## **"HEADACHE"**

December 14, 15

## **"THE LUMP IN THE BREAST"**

January 4, 5, 1962

Subsequent programs will be announced in later publications. All may be viewed at any of the following schools:

### **ALLENDALE**

Allendale Training School

### **ANDERSON**

Westside High School

McCants High School

### **BARNWELL**

Barnwell High School

Butler High School

### **BISHOPVILLE**

Bishopville High School

Dennis High School

### **BLACKVILLE**

Blackville High School

Macedonia High School

### **BLANEY**

Blaney High School

### **CAMDEN**

Camden Junior High School

Camden Senior High School

Jackson High School

### **CAYCE**

Brookland-Cayce High School

### **CENTRAL**

Daniel High School

### **CHARLESTON**

Rivers High School

Simonton High School

### **CHARLESTON HEIGHTS**

Chicora High School

### **CHESTER**

Chester High School

### **CLEMSON**

Calhoun-Clemson Elementary School

### **CLINTON**

Clinton High School

### **COLUMBIA**

A. C. Flora High School

Booker T. Washington High School

C. A. Johnson High School

Columbia High School

Crayton Junior High School

Dentsville High School

Dreher High School

Hand Junior High School

### **DARLINGTON**

Brunson-Dargan High School

Saint John's High School

Mayo High School

### **FAIRFAX**

Allendale-Fairfax High School

### **FLORENCE**

McClenaghan High School

Paynor Junior High School

Southside High School

Wilson Senior High School

### **GREENVILLE**

Parker High School

Washington High School

### **GREENWOOD**

Brewer High School

Greenwood Senior High School

### **HARTSVILLE**

Hartsville High School

Hartsville Junior High School

### **LANCASTER**

Lancaster Senior High School

### **MANNING**

Manning High School

Manning Training School

### **PICKENS**

Pickens High School

### **PROSPERITY**

Mid-Carolina High School

### **ROCK HILL**

Emmett Scott High School

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 McLaurin High School  
 Lincoln High School

## HILL-BURTON IN SOUTH CAROLINA

Since 1947 over \$80.5 million have been spent in South Carolina for the construction of hospitals and medical facilities. Nearly \$38 millions of this amount came from grants-in-aid under the federal Hill-Burton program.

Pictured on this page are five of the buildings erected with these funds. These represent three of the categories under which the construction is allowed, namely mental and general hospitals and health centers.



*Orangeburg County Health Center, Orangeburg—Hill-Burton public health center opened in 1959. Federal share \$93,730.54 and total facility cost \$187,461.09.*

In the field of mental illness only 1/5th the estimated number of needed hospital beds are available. Remedial action in this area is now being taken inasmuch as the last General Assembly of our state appropriated funds for construction of such facilities to be supervised by the South Carolina Mental Health Commission. The current trend is to develop psychiatric facilities in general hospitals, rather than to concentrate all available mental hospital beds in one state hospital. In South Carolina five general hospitals now have psychiatric units, these being in Anderson, Spartanburg, Greenville, Columbia and in the Medical College Hospital in Charleston.



*Spartanburg Mental Health Clinic, Spartanburg. An out-patient clinic building constructed under Public law 482 (an amendment to the Hill-Burton Program) and completed in 1958 at a cost of \$50,000.*

**SWANSEA**  
 Swansea High School

Officials of these schools have been informed of the inauguration of medical TV programs. It is suggested that groups of physicians in each locality served make their own arrangements with them for viewing in the schools. The responsibilities of production and transmission of programs rest with the Medical College and ETV stays, but responsibility for local arrangements must remain with local medical organizations.



*Fairfield County Memorial Hospital, Winnsboro—Hill-Burton 25 bed hospital opened in 1955. Federal share \$337,341.65 and total project cost \$528,362.15.*



*Intensive Treatment Facility at State Hospital (James F. Byrnes Hospital and Clinic Building), Columbia—200 bed hospital opened in 1959. Federal share \$414,714.56 and total project cost \$2,571,326.41.*



*Clarendon County Memorial Hospital, Manning—Hill-Burton 52 bed hospital opened in 1954. Federal share \$189,651.84 and the total project cost \$575,765.52.*

Future grants will undoubtedly be used for projects to provide nursing home care and care of the chronically ill. According to statistics of the U. S. Public Health Service, which administers Hill-Burton funds, South Carolina has a woeful deficiency of nursing home and chronic disease beds, the met needs in these fields being approximately only 14% and 6%, respectively.

## MEDICO

What is MEDICO? Its purpose, needs and organizational set-up were explained by Dr. Peter Commanduras, its co-founder in 1958 with the late Thomas A. Dooley, M. D., during the course of the 110th annual meeting of the A. M. A. to invited representatives of each of the medical specialty organizations, such as surgeons, radiologists, internists, pediatricians, etc.

The story of the world's medical needs, as told to them by Dr. Commanduras was a grim one. He reported:

1. One half of the people of the world rarely, if ever, in their lifetime have a physician to treat their ills.
2. Malnutrition, vitamin deficiencies and even starvation take an annual toll of millions of children in Asia, Africa, South America and the Caribbean.
3. Readily correctible club feet and other congenital deformities doom tens of thousands of children to go through life as cripples.
4. Trachoma prevention and modern ophthalmological treatment and surgery could save the sight of thousands of persons, chiefly in Southeast Asia, the Middle East and North Africa who face a lifetime of blindness.
5. Diseases that have yielded to modern medical science, such as smallpox, cholera and malaria, still cause millions of deaths annually in these areas.

Substantial progress, particularly in public health, has been made in many nations with the help of the World Health Organization, International Cooperation Administration, and private foundations. These programs, although of the utmost importance, only indirectly touch the lives of the world's sick, blind and disabled. Their need is immediate and personal; their primary interest is not political or ideological. Such words as freedom, justice, dignity and security are meaningless to those faced with the heritage of a life of discomfort or agony.

That something tangible and definitive can be done to reduce suffering on a sufficiently broad scale as to be significant has been demonstrated by MEDICO, which operates under two basic concepts:

1. To bring direct, physician-to-patient medical aid to areas where the need is greatest, treating the sick who otherwise would receive no medical attention.
2. To teach and train others to give this kind of medical assistance.

From one small hospital in Laos in 1958 to fifteen projects in 12 nations currently is evidence of MEDICO'S need and early success. The American physicians who have personally participated in MEDICO'S overseas work on a short-term basis have all been volunteers who have received no pay. Many

have paid their own travel and maintenance. Many have contributed their vacation time to this endeavor.

The purpose of the special meeting in connection with the AMA annual session was to invite formal participation by all national medical and surgical societies in the MEDICO program. Under the proposal each specialty organization would be represented on the MEDICO Board of Directors and each would form a special committee to implement the MEDICO program objectives.

The representatives of the specialty societies present as individuals enthusiastically and unanimously endorsed the proposal in principle and agreed to present it to their own organizations for formal action. In view of the importance of the undertaking Dr. Howard A. Rusk writing in the New York Times stated "It is almost inconceivable that any of our major medical and surgical societies should refuse the invitation".

Today more than at any time in our history, the leadership of our nation is challenged. Direct, physician-to-patient services by American doctors offer a proven, effective way by which the sick, blind and crippled of the world may understand in a personal way the value we place on human dignity.

Inasmuch as it will take time to get the program as outlined above worked out and organized, individuals may volunteer by writing Dr. Peter D. Commanduras, Medico, 420 Lexington Avenue, New York 17, New York, or telephone MU 5-8460. Well-trained and well-motivated surgeons, internists, general practitioners and anaesthesiologists are currently needed in Afghanistan, Cambodia, Vietnam, Malaya, Laos, and Haiti. Salaries, length of service and specific information concerning each project will be sent on request.

This article is based on that of Howard A. Rusk, M. D., which appeared in the New York Times, Sunday, July 2, 1961.



"Certainly the Arthritis came back, but so did your check."

# Book Reviews

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*PROGRESS IN MEDICAL GENETICS*, Vol. I., Edited by Arthur G. Steinberg. Grune and Stratton, New York and London—1961. Pp. 341. Price \$9.75.

This is the first of a proposed series of books designed to help the clinician and others interested in medical genetics "keep up" with the rapid advances being made in this field today. The first volume consists of 8 excellent chapters written by highly competent medical geneticists and physicians. It is not designed for casual reading nor is it designed for the busy practicing physician if he has had little or no training in genetics.

In addition to chapters on mutation, natural selection and congenital malformations in man, the book includes discussions of ABO incompatibility and the relation of these blood groups to such diseases as duodenal and gastric ulcer, gastric carcinoma, pernicious anemia, etc. Hematologists should find the chapter on hemoglobinopathies informative and useful.

Probably the most striking advance in the last 5 years has resulted from a series of discoveries relating observable changes in chromosome number and form with such clinical entities as mongolism, gonadal aplasia, Klinefelter's syndrome and other congenital abnormalities.

Elsie Taber, Ph. D.

*THE NATURE OF SLEEP*. Ciba Foundation Symposium. Little Brown and Company, Boston, 1960. 416 pp. Price \$10.00.

The more advanced techniques of neuroanatomy and neurophysiology have been directed toward elucidation of the nature and mechanisms of sleep. This symposium includes a considerable group of European investigators and a few from the United States all of whom have made experimental inquiry in this field. Dr. Nathaniel Kleitman, for instance, is known to have spent the better part of an active career in this particular area of study. Their summaries here bring this specialized interest together in an up-to-date convenient form.

R. P. Walton

*PATHOLOGIC PHYSIOLOGY* — Mechanism of Disease. By William A. Sodeman. 3rd Edition. W. B. Saunders Company, Philadelphia, 1961. pp. 1182. Price \$15.00.

This highly readable volume covers the important areas of clinical physiology. Common, routine medical situations are interpreted in terms of recent investigative findings and this is done with a clear incisiveness and very little of the haze which commonly obscures the area between experimental and practical medicine. The reason for unusual clarity and bright gems of interpretation might be found in the qualifications of the 28 collaborating authors. Each combines a back-

ground of original experimentation, bed-side teaching and long-time responsibility for patient care. The illustrations are exceptionally effective in transmitting concepts. Any serious reader consulting this volume can be certain to find something both stimulative and informative. Significant new revisions include the section on medical genetics, hemodynamics, neurologic disorders, radioactive exposures and space medicine.

R. P. Walton, M. D.

*TRAITOR WITHIN—Our Suicide Problem* by E. R. Ellis and G. N. Allen. Doubleday and Company, Inc., Garden City, N. Y. 1961. \$3.95.

This book treats exhaustively from a statistical point of view the problem of suicide which ranks eleventh in the causes of death in the United States. The authors have been studying the subject for fifteen years and treat it from every conceivable angle—its prevalence, its means, the notes which the suicide leaves, its concept in various civilizations, the ideas on it in our own society, the social losses it entails, ways to attack it. The value of the book in our opinion lies in the two last named areas. The appendix contains a training guide and case form of an experimental suicide-prevention group in Miami, Florida, calling itself FRIENDS. The book is a plea for the recognition of suicide as a health problem and consequent skilled attention for persons threatening to take their own lives, rather than the prevalent disregard or dismissal of the matter as an attention getting mechanism or a passing mood.

M. S. A.

*CARDIOVASCULAR DYNAMICS* by Robert F. Rushmer, Second Edition. W. B. Saunders Company, Philadelphia and London, 1961. \$12.50.

This is an excellent text since it is designed for the first year medical student up to the experienced cardiologist. The illustrations are very good and serve to present concepts in a visualized manner. This makes the reading much easier, especially since graphs and tables have been omitted. Although at times the author's opinion appears dogmatic, this aids in giving the student a background which is not confusing as would be the case if many explanations and hypotheses were presented. This book is unusual as compared to other books in that it presents cardiovascular problems with a clinical and physiological approach. It should be recommended to all individuals who are interested in cardiovascular problems.

P. C. Gazes, M. D.





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*Research in the Service of Medicine*

*GOOD-BYE, DOCTOR ROCH* by Andre Soubiran. Doubleday and Company, Inc., Garden City, N. Y. 1961. \$4.50.

Dr. Soubiran of Paris, a man of position and activity in the medical world, has already produced a trilogy of novels known as *Men in White* on medical themes. Translations of these three novels received popular and critical acclaim in the United States. This new work brings out forcibly another phase of medical and psychiatric problems.

Written as a diary, the book tells the story of a man who has allowed himself to be confined in an asylum in order to protect an innocent woman. Gradually by his good conduct he is allowed privileges which bring him into contact and friendship with Dr. Roch, a dedicated physician who is attempting, despite bureaucratic opposition and intramural apathy, to better the conditions of the inmates of a hospital for the insane. The frightful conditions prevailing in the institution are described with gruesome detail. The reader is happy to discover that the scene is laid in 1951, and to be reassured that the depressing picture has been brightened by many needed reforms.

Dr. Roch is the central figure of the book. He becomes involved in a strange triangle which includes the inmate and his faithful and charming wife, but a threat of tragedy for all three is dispelled by circumstances which might best be encountered at first hand by the observing reader of this well written novel.

J. I. W.

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*HOSPITALS, DOCTORS, AND DOLLARS* by Robert M. Cunningham, Jr. F. W. Dodge Corporation, New York. 1961 \$6.95.

This is a collection of editorials and short articles by the editor of *The Modern Hospital* magazine. It covers a variety of subjects with which hospitals and its various officials must have concern—costs, prepayment, staffing, public relations, nurses, etc. The tone of the articles varies from the cynical to the facetious, with a healthy accent on the main body of serious comment and exposition without bias.

This is a very readable book, with a light touch, and is eminently eligible for the bookshelf, or rather, the hands and eyes, of anyone interested in hospital affairs (and what doctor should not be!) either as a participant in management or as a consumer of services.

J. I. W.

---

*SYSTEMATIC OBSERVATIONS OF GROSS HUMAN BEHAVIOR* By G. R. Pascal and W. O. Jenkins. Grune & Stratton, New York. 123 pages, \$4.75.

This is an interesting small book whose main purpose is to develop a technical interest in observing the gross conduct and behavior of individuals in terms of the everyday behavior and activity without reference to the verbal or strictly emotional content of personality. This book is an attempt to experi-

mentally and scientifically place the behaviorism of Watson on a more contemporary setting. The former stimulus-response era of Watsonian behaviorism is brought up to date by employing observations of physical behavior, correlating this with certain gross general responses. The purpose of this study is to emphasize a deeper psycho-dynamic understanding of hitherto ignored behavior or overt gross physically-oriented behavior.

The overall value of this book is to bring into clearer focus the importance of observing how a patient really feels and thinks through his physical manifestations of responses in the environment. The author attempts to employ ten measures of degree of behavior response and also uses 14 basic responses of physical conduct in order to bring out the deeper thinking and feeling pattern of an individual, without employing any particular verbal content.

This book offers a unique study in what is commonly referred to in the psychoanalytic technique as the non-verbal response, which often gives a great deal of meaning much before the actual or unconscious responses are made in interviews and discussions. In simple terms, this book adds a technical method in psychiatric work comparable to what the medical diagnostician does in a very careful, precise physical examination.

This book is particularly valuable to medical students, since it allows them to have a simplified easy approach, by using physical means to understand the deeper underlying thinking and feeling of their patients, without having to be concerned about complex personality theories.

Norton Williams, M. D.

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*PSYCHOANALYSIS AND SOCIAL PROCESS*. Fourth Volume of a series on Science and Psychoanalysis. Edited by Jules H. Masserman, M. D. Chairman of the Publications Committee of the Academy of Psychoanalysis. Grune and Stratton, New York, 1961. 189 pages, \$6.75.

This is a short, but rather imposing, volume in which the main emphasis is to explore the possibilities of a closer relationship between cultural anthropology and sociology and the science of psychoanalysis. There are contributions from several workers in the field of anthropology and sociology, notably Drs. LaBarre, Kardiner, Talcott Parsons and Spiegel, whose presentations from their own line of work indicate a very deep interest in a cross-disciplined approach to the fields of anthropology, sociology and psychoanalysis. All of these workers agree, in general, that, up to this time, attempts to explain the meanings of the patterns of culture or group action and its relation to individual development have been made through the use of older psychodynamic patterns of individual personality development.

These writers, in their separate articles, all indicate a need for a clearer understanding of the relationship of newer ideas of personality development to the whole structure of culture and society. This move-



ment in the field of social psychiatry is called the culture-personality movement, and is a relatively new fresh attempt to broaden legitimately and scientifically the horizons of psychoanalysis into all fields of human conduct and action, whether individually or in group form.

This is a particularly interesting group of articles that would be of help to all practitioners of medicine since it encompasses the newer theories of psychoanalytic practice. It is particularly important for its better understanding of the social and cultural features in a person's life; that is vital in understanding the total patient. The disciplines of psychoanalysis and

anthropology in this setting become a natural ally of one another and can have very practical meaning in the development of the understanding of the individual in his group relationships.

The rest of the book takes up some special articles dealing with some extended scientific attempts to further develop the technical aspects of psychoanalysis.

This book is a very definite worthwhile contribution to the contemporary forms of psychoanalytic development.

Norton Williams, M. D.

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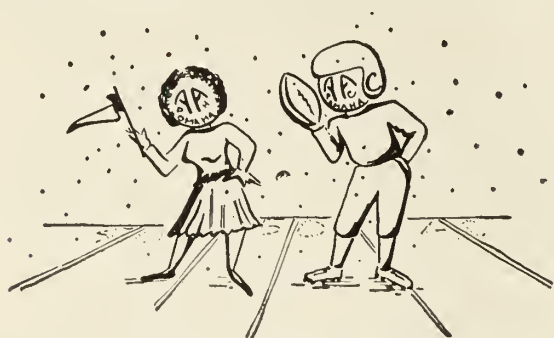
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# The Journal

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### BREAST CANCER—ITS TREATMENT AFTER SURGERY

JAMES F. NEWSOME, M. D.

*Director of Tumor Clinic, N. C. Memorial Hospital  
Assistant Professor of Surgery, University of North Carolina School of Medicine, Chapel Hill, North Carolina*

The scope of the problem posed by metastatic cancer of the breast is indicated by the fact that upon admission to the hospital 55% of patients will show evidence of metastasis. A vast majority of these meta-

Figure 1

Incidence of Breast Cancer (Female)	72/100,000
Incidence of Metastases on Admission	+55%

stases are outside of the scope of the conventional radical mastectomy, and death from the disease is assured, the only question being the time. With the advent of the corticosteroids for replacement therapy, adrenalectomy and hypophysectomy have become feasible procedures, and more recently, the cytotoxic agents have made their appearance, enlarging the physician's armamentarium. The wise use of these modalities at the appropriate time, with the judicious use of narcotics, pain-relieving operations, and a great deal of honest sympathetic art of medicine, while offering no prospect of cure, will aid immeasurably in allowing for comfortable and even useful months of life.

In spite of attempts to set a logical and rational basis for the management of metastatic cancer of the breast, we have, in the

main, been unsuccessful and, excepting a few general and seemingly valid observations, one is forced to re-emphasize the empirical nature of this treatment. Nevertheless, it is well documented that each breast cancer behaves differently; some slow growing, late metastasizing; while others are rapidly lethal — a correlation not always possible by the pathologist's interpretation of the degree of anaplasia. Roughly 15% of breast cancers will follow a protracted course. The difference in five-year and ten-year survivals after therapy emphasizes this fact.

Figure 2

Five Year Survival	±40%
Ten Year Survival	±25%

The occurrence of metastasis 10, 15, and even 20 years after mastectomy, with an intervening period completely free of symptoms, is not a rare situation.

It is also a fact that a certain number, roughly 40% of breast tumors, will show transient regression after tampering with the hormonal status of the host. It has been these observations, strengthened by repeated animal experiments, showing the stimulating effect of estrogens, and the total inhibition by androgens of the development of spontaneous breast cancer,<sup>9, 8</sup> that have led to the concept of hormone dependency. Translated into clinical terms, the longer the duration of the disease without evidence of widespread actively grow-

The original work herein referred to was supported in part by a grant from the Public Health Service and the American Cancer Society.

ing metastasis, the better the chance of cure, and failing this, the more likely the lesion to respond to alteration in hormonal environment of the host. This trend is clearly shown by those patients benefited by surgical division of the pituitary stalk, where the average duration of the disease prior to stalk section was 79 months in the favorable group, as compared to 32 months for those not benefited.<sup>2</sup>

Figure 3  
Comparison of Age and Duration of Disease  
in Patients Undergoing Surgical Division of  
Pituitary Stalk

	Average Age	Average Duration of Disease
Patients Benefitted	54.8 yrs.	79.4 mos.
Patients Not Benefitted	49.2 yrs.	37.2 mos.

Regardless of the definitive treatment carried out, one is frequently faced with the problem of distant metastases which are apparent at the time of operation. In general, there seems to be little reason to begin palliative therapy at this juncture. A period of observation is of great help in determining the growth characteristics of these metastases. This also raises the question of prophylactic castration, the subject of several reports,<sup>3, 12</sup> the conclusions of which are that there is a delay in the onset of recurrence in those patients so treated. Analysis of this data, however, suggests that proof of the value of this operation is, to date, lacking. If some benefit is to be derived, is it greater than that obtained by later castration, the duration of which would be additive to the length of the so-called "free period"? This question is unanswered, and until more information is available, the period of observation recommended here seems logical. As previously noted, 15% of breast cancers will follow a protracted course, even with overt metastasis. The presence of irremovable metastatic cancer is not a reason for further treatment, but rather treatment is begun only after one has gained more knowledge of the biologic behavior of the tumor and a better understanding and rapport with the host.

With evidence of growth of metastasis in the pre-menopausal patient, castration will offer objective benefit in 44% of instances, with an

average duration of 9 months.<sup>13</sup> Other information is also gained. The fact that there is or is not a response is of considerable help in planning further therapy. If one is dealing with a dependent lesion, then later hormone therapy can be approached with some expectation of additional response. If nothing is gained by castration, chances are that other avenues should be explored. This is not to say that this correlation is always as neat and concise as implied, but the experience in our clinic and that of Ray and Pearson<sup>9</sup> implies that this association holds most of the time. Added support is gained from Jessiman's report<sup>4</sup> that dependent tumors never lose this trait, an observation which is at variance with our own.

In recent months, a significant report<sup>11</sup> of the effect of estrogens and androgens in metastatic breast cancer was published. In summary, this study, involving nearly 400 patients in each of two groups, disclosed the following: in all ages the use of androgens (as testosterone propionate) was effective in bringing about an objective remission in 22% of patients. In the postmenopausal patient, estrogens (as diethylstilbesterol) were of benefit in 38%. A small number of pre-menopausal women showed no significant response to the use of the female hormone.

Following maximal benefits from oophorectomy, these experiences indicate that androgens, given as testosterone propionate, 100 mg. three times a week, should be tried. In those improved benefit can be expected for an average of seven to eight months, after which time the metastases show activity. Withdrawal of the hormones at this time, will occasionally be followed by another period of betterment, of shorter duration, and in a lesser number of patients.

At the North Carolina Memorial Hospital, we have had little experience with adrenalectomy, and none with total hypophysectomy. Rather, since 1955, when the procedure was introduced by Dr. Gordon Dugger,<sup>1</sup> we have been carrying out a functional hypophysectomy by the surgical division of the pituitary stalk and the insertion of an impervious plate between the cut ends, covering the sella turcica to prevent the regeneration of the vessels of the hypothalamic—hypo-



physcal portal system, the integrity of which seems necessary for total pituitary function. That a functional hypophysectomy is achieved is indicated by the post-operative endocrine excretion studies which are in keeping with a true and continuing hypopituitary state.<sup>2</sup> Due to the inordinate amount of time necessary to carry out these detailed studies which are done pre-operatively as well as at periodic intervals during the post-operative period, and because we have been too selective in our choice of patients, only 32 women with metastatic breast cancer have been subjected to this operation.

The procedure itself is relatively simple. Excepting the time necessary for the opening and closing of the routine frontal craniotomy, actual operating time is on the order of 15 to 20 minutes. The only supportive therapy necessary is the ingestion of 5 to 7.5 mg. of prednisolone daily to maintain a normal level of corticosteroids. In an occasional patient, it is necessary to use posterior pituitary extract in the control of diabetes insipidus and in even a lesser number of patients, it has been necessary to supplement thyroid function with exogenous thyroid extract.

Of the 32 patients operated upon there have been three deaths, all in the early group. In retrospect we would now pass up these patients as inoperable. In one patient there was failure to achieve division of the stalk, supplying us with a "sham" preparation. Of the remaining 29 upon whom evaluations can be made, twelve (41%) have achieved objective benefit, the average duration of which is, to date, about ten months. It is not the purpose here to discuss the rationale or the place of this procedure in the control of metastatic cancer as these data are the subject of a report soon to be published. We do feel that the results to date justify further study.

An interesting and informative by-product has been a better understanding of the hypophyseal physiology.<sup>14</sup>

There is no reason to think that division of the pituitary stalk is any different from adrenalectomy or hypophysectomy in its influence upon the growth of breast cancer. A recent retrospective study of the value of adrenalectomy and hypophysectomy revealed

identical improvement rates.<sup>10</sup> It seems a reasonable prediction that with more experience, pituitary stalk section will prove to be no better. Indeed, the duration of benefit is not that of total hypophysectomy, which has a mean of 17 months.<sup>9</sup> The true value of division of the pituitary stalk is yet to be assessed owing to the small number of patients involved in this study and the fact that the best responders are still alive. After the full benefit of these ablative procedures has been exhausted, nothing further of any consequences can be expected from hormonal therapy. This stage of the disease is usually marked by disseminated metastases with or without focal disabling or impending disastrous metastatic deposits. Roentgen therapy alone or in combination with the cytotoxic agents offers excellent palliation.

The search for an effective anti-cancer drug continues. To date, there is no good agent. Our experiences have included the use of nitrogen mustard,<sup>7</sup> chlorambucil, Myleran, tetramin, cyclophosphoramide, sarcolysin, and PA-144. In our hands, cyclophosphoramide has been the most effective. The results of twenty consecutive "clean" cases are depicted in Figure 4. Approximately 50% have been benefited,

Figure 4

Cytosan Summary—Carcinoma of Breast

	4+	3+	2+	0	No. Eval.	Total
Objective Response	1	2	8	7	2	20
Complications						
Hematologic	0					
Alopecia	8					
Dysuria	5					

with their objective remission ranging from 1 to 12 months. The most striking results have been in the relief of pain and the control of effusions—all treated by giving a total "loading" dose of 40 mg. per kilogram intravenously in two divided doses, followed in 10 to 14 days (after recovery of the bone marrow depression) with 200 mg. per day orally, altered as necessary to keep the white blood count in the range of 3,000. There is some nausea and occasional vomiting. The most serious side effect is almost total alopecia, which is encountered in 40 to 50% of instances, appearing

in six to eight weeks, with regrowth in three to four months whether or not treatment is interrupted. A potential complication rests with the severe leukopenia which occasionally reaches 500 — commonly below 1,000. Even without antibiotics, there has been no trouble to date. Twenty-five percent of patients have noted a transient dysuria. After four to six months of therapy in a large number of patients, a severe anemia develops, requiring frequent transfusions. This is not an aplastic anemia, as evidenced by the fact that the granulocytes and thrombocytes are usually normal.

More specifically, chemotherapy seems indicated in patients who have extensive metastasis to the liver, lungs, and brain. It has been a common finding that once breast cancer metastasizes to the liver, it gains a certain protection from the effects of hormone therapy, be it exogenous or ablative. With severe pulmonary metastasis, lung function is so compromised as to make any operative procedure an undue risk, and assuming the metastasis to be responsive to hormone therapy, the one or two weeks necessary to see any benefit will probably be a period of time much longer than the patient can afford. Chemotherapy in patients with cerebral metastasis will show some of its most dramatic, though short-lived benefits. The small decrease in the size of brain deposits will exhibit a dramatic and striking improvement in the neurologic deficits and state of consciousness which these people show. When combined with radiation therapy, if the location of the metastasis is known, a significant period of palliation is obtained.

Finally, the operative procedures for the relief of pain are not to be overlooked—best reserved for the severe pain problem in women whose metastases have spared the vital organs until relatively late. With a life expectancy of a few weeks at the most, the opiates are superior. If survival seems likely for a much longer period, bilateral cervical cordotomy should be undertaken before any chance of drug addiction is possible. If addiction is present, the operation is not worthwhile.

The above comments, though directed at the pre-menopausal patient, are quite applicable to the post-menopausal woman, with the

exception that castration is not of apparent importance, and estrogens are substituted for androgens. (For the purpose of this discussion, the post-menopausal state is taken as five years after the last menstrual period.)

It is with emphasis upon the necessity of gaining some familiarity with the biologic behavior of the given cancer in a given patient that the following schemes are suggested:

#### *Management of the Pre-Menopausal Patient With Breast Cancer*

1. Definitive therapy (generally radical mastectomy)
2. Period of observation (palliative therapy begun only when there is *clinical* evidence of progression of disease)
3. Bilateral oophorectomy
4. Androgens
5. Functional hypophysectomy; surgical division of the pituitary stalk
6. Other modalities:
  - a. Roentgen therapy
  - b. Chemotherapy  
Nitrogen Mustard derivatives, P<sub>32</sub>, anti-metabolites
  - c. Pain-relieving operations
  - d. Narcotics

#### *Management of the Post-Menopausal Patient With Breast Cancer*

1. Definitive therapy (generally radical mastectomy)
2. Period of observation (palliative therapy is begun only when there is *clinical* evidence of progression of disease.)
3. Estrogens
4. Functional hypophysectomy; surgical division of the pituitary stalk (if under 65, no liver or significant brain metastasis, reasonable operative risk)
5. Other modalities:
  - a. Roentgen therapy
  - b. Chemotherapy  
Nitrogen Mustard derivatives, P<sub>32</sub>, anti-metabolites
  - c. Pain-relieving operations
  - d. Narcotics

#### *Summary*

In summary then, the presence of metastatic incurable breast cancer is not a signal to undertake palliative therapy. A period of ob-

servation is of considerable value in appraising the aggressiveness of the lesion. One is frequently rewarded by having the tumor lie dormant for some years.

When the metastatic deposits show activity,

there are several methods of treatment now available. One scheme incorporating these modalities is suggested for approaching this problem in the pre-menopausal and post menopausal patient.

#### REFERENCES

1. Dugger, G. S., Van Wyk, J., and Newsome, J. F.: Transection of the hypophyseal stalk in the management of metastatic mammary carcinoma. *Am. Surgeon* 24:603, 1958.
2. Dugger, G. S., Van Wyk, J., and Newsome, J. F. (Unpublished data)
3. Horsley, J. S.: Bilateral oophorectomy with radical operation for cancer of the breast. *Surgery* 15:590, 1944.
4. Jessiman, A. G.: Tumour autonomy in carcinoma of the breast. *In: Endocrine Aspects of Breast Cancer*, pp. 77-89. Edinburgh and London, E. & S. Livingstone Ltd., 1958.
5. Luft, R. et al.: Hypophysectomy in the management of metastatic carcinoma of the breast. *In: Endocrine Aspects of Breast Cancer*, pp. 27-35. Edinburgh and London, E. & S. Livingstone Ltd., 1958.
6. Nathanson, I. T. and Andervont, H. B.: Effect of testosterone propionate on development and growth of mammary carcinoma in female mice. *Proc. Soc. Exper. Biol. & Med.* 40:421, 1939.
7. Newsome, J. F.: The role of nitrogen mustard in the palliation of malignant disease with particular reference to pain. *Am. Surgeon* 24:651, 1958.
8. Newsome, J. F. (Unpublished data)
9. Ray, B. S. and Pearson, O. H.: Hypophysectomy in the treatment of advanced cancer of the breast. *Ann. Surg.* 144:394, 1956.
10. Report of joint committee on endocrine ablative procedures in disseminated mammary carcinoma. *J.A.M.A.* 175:787, 1961.
11. Report to the Council: Androgens and estrogens in the treatment of disseminated mammary carcinoma: Retrospective study of 944 patients. *J.A.M.A.* 172:1271, 1960.
12. Treves, N.: An evaluation of prophylactic castration in the treatment of mammary carcinoma. *Cancer* 10:393, 1957.
13. Treves, N. and Kinkbeiner, J. A.: An evaluation of therapeutic surgical castration in the treatment of metastatic, recurrent, and primary inoperable mammary carcinoma in women. *Cancer* 11:421, 1958.
14. Van Wyk, J., Dugger, G. S., Newsome, J. F., Thomas, P. Z.: The effect of pituitary stalk section on the adrenal function of women with cancer of the breast. *J. Clin. Endocrinol.* 20:157, 1960.

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*Propagation of induced venous thrombi*, by R. R. Bradham (Charleston) *Surg. Gynec. & Obst.* 113:324-328, Sept. 1961.

This laboratory study includes 44 animal experiments designed to investigate thrombus propagation. Thrombosis was induced by passing a 10 milliampere current through the femoral vein wall of dogs for one hour. Groups of dogs were sacrificed at intervals between 6 hours and 20 days post-thrombosis. Rapidity and extent of thrombus propagation were determined. The results indicate that thrombus propagation is rapid and is limited by the size of the area of vasculitis created to produce these thrombi. This study suggests that for present methods of therapy to be effective, a state of blood hypocoagulability must be effected immediately upon making a diagnosis of thrombophlebitis as delay will allow for rapid extension of the thrombus. Presently this can be effected best by intravenous infusions of Heparin.



# PALLIATION IN FEMALE PELVIC CANCER

CHARLES A. BREAM, M. D.

*Department of Radiology, School of Medicine,  
University of North Carolina, Chapel Hill*

A look at vital statistics will provide an idea of the scope of the problem of palliation in female pelvic cancer. Each year 181,500 new cases of female pelvic cancer are reported in the United States. Table 1 shows the number of new patients reported to the South Carolina State Department of Health for 1960. It also indicates that only about 50% of these patients seek medical attention while the lesion is still localized.

to a little over one-half of the patients. This is generally true in most published series of palliative care of cancer and emphasizes the important role of this therapeutic modality. In our series the average period between the completion of the initial form of treatment and the beginning of the palliative treatment was 17.6 months. At 12 months, approximately 50% of patients requiring palliation will become clinically evident, and at 18 months, approxi-

TABLE 1  
NEW CASES OF CANCER REPORTED IN SOUTH CAROLINA DURING THE  
CALENDAR YEAR 1960

Cervix	Total	Localized	Total		Total	
			White	Negro	Localized	Localized
By Cancer clinics	280	106	124	55	156	51
By private physicians	214	128	174	110	40	18
Stage not given	12		9		3	
GRAND TOTAL	506	234	307	165	199	69
Endometrium						
By Cancer clinics	34	13	17	7	17	6
By private physicians	39	28	33	24	6	4
Stage not given	2		1		1	
GRAND TOTAL	75	41	51	31	24	10
Ovary						
By Cancer clinics	27	6	17	5	10	1
By private physicians	49	11	44	11	5	
Stage not given	4		4			
GRAND TOTAL	80	17	65	16	15	1

Thus it is true that some of them, when first seen can be considered only for palliation. The overall five-year survival for this group will be 50%, and two-year survival 60%. Therefore, the number of these patients that will be considered each year for palliative therapy will approximate 300, but only one-third to one-half will actually be treated. In our own institution, where 287 patients with residual or recurrent disease were seen during an eight-year period, 145 received palliation by one or more methods. The various palliative procedures used for the pelvic cancers are shown in Table 2. Irradiation, which includes the use of radium and radioactive isotopes, was given

mately 70%.

In this discussion, the term "advanced cancer" means incurable by any known methods. Thus, the death of the patient from her disease is accepted as inevitable and all management becomes palliation of symptoms and relief of distress over the remaining span of life. This concept has been tersely stated: "The duty of the doctor is to prolong life but it is not his duty to prolong the act of dying." The general supportive measures, such as transfusions, tranquilizers, etc., will not be discussed.

The most common symptoms requiring palliation are:

TABLE 2  
TYPE OF PALLIATIVE PROCEDURES BY SITE

Procedure	Cervix	Ovary	Endo- metrium	Vulva	Total	
Irradiation	50	20	6	2	78	54%
Chemotherapy	1	13	5	0	19	13%
Urinary diversion	19	0	0	0	19	13%
Fecal diversion	9	3	1	0	13	9%
Hypogastric artery ligation	1	0	0	0	1	0.6%
Cordotomy	15	0	0	0	15	10%
TOTAL	95	36	12	2	145	

1. Pain
2. Local recurrence
3. Pelvic mass
4. Ascites
5. Vesicovaginal fistula
6. Hemorrhage
7. Uremia
8. Bowel obstruction
9. Bone metastases
10. Distant metastases.

The methods of palliation available are:

1. Irradiation, including radium and isotopes
2. Chemotherapy
3. Diversion of the urinary stream
4. Diversion of the fecal stream
5. Cordotomy
6. Narcotics.

I will discuss briefly these therapeutic measures and report their results in our hospital. The criteria used to evaluate palliation are those suggested by Tod.

#### *Plan of Therapy*

It is highly desirable to have one doctor solely responsible for the overall management of the patient. This gives her a real psychological crutch. In many instances, this is the family physician who is probably best qualified, and it is hoped that this review will be of some help. In our own institution this role is assumed by the gynecologist. When the patient becomes a candidate for palliative therapy, the radiologist, the chemotherapist, the urologist and the neurosurgeon see her in consultation. Our neurosurgeon especially likes to see these women once or twice before considering doing a cordotomy. After the consultations, a flexible overall plan of therapy is adopted. In this way, a tentative plan of management until death is outlined, the timetable being altered as necessary according to the individual response. This method of attack also lessens the tendency to "throw in the

sponge" when new complications arise.

Since x-ray therapy is most often used, it will be discussed first. Let me emphasize one point: The primary function of modern radiotherapy in malignant disease is cure, but, because of our lack of complete knowledge of neoplastic behavior or the so-called biologic predetermination of cancer, we are unable to cure all patients. Yet it must be remembered that even in these failures some palliation has been accomplished.

#### *Radiotherapy*

1. There must be reasonable expectation of relief. This implies that distressing symptoms are present. It is an unwise policy to treat just because we know cancer is present. The patient should be aware that she is being benefited. The good effects may be short-lived, but thereafter these women are no longer without hope until the very end. They believe that there is always something else that will help. On the other hand, if treatment is given in the absence of symptoms, the subsequent miseries, even though they may have been postponed, often will be attributed to the x-ray therapy.

2. Treatment should be as short as possible and reaction minimal. It is implicit that palliation by radiotherapy should not add a skin reaction requiring additional care. The course of treatment should not be protracted since the objective is to produce vigorous biologic damage to the tumor cells in a short time. In an attempt to do this, 75 to 85% of the skin tolerance dose is delivered in 4 to 8 days.

3. Dose should be adequate. In order to obtain some beneficial effect, a certain dose must be delivered to the tumor. This is in the order of 65 to 75% of a curative dose based on a time dose relationship rather than "just a little x-ray." Most of these women have already had a course of irradiation, and it requires some ingenuity to use effective portals in the treat-

ment in order to achieve the desired tumor dose. Just a word of caution: It is unwise in many respects for the referring doctor to outline in detail the course of irradiation. This is the therapist's domain. It also avoids the possibility of contradictory statements which often upset the patient. On the other hand, it is the radiologist's responsibility to keep the referring physician completely informed as to the course of therapy, probable results and necessary patient care.

4. Radiotherapy must offer more than other measures. In evaluation of the symptoms to be palliated it is important to select the therapeutic modality that experience has shown gives the best results. Irradiation, perhaps, is often used because it is readily available and easily given rather than because it is the best form of palliation for the distressing symptom. For example, pain from bone metastases is much better treated by x-ray whereas that from presacral plexus nerve involvement is best controlled by cordotomy.

5. Avoid "rescue." A very difficult problem in terminal cancer care with all its ramifications is when to do nothing. Certainly comatose patients and those in poor condition with widespread metastases should be left alone. But what about the cervix patient who is bleeding? Should we control the bleeding with a simple radium application only to have her

die a short time later from another hemorrhage but in the meantime having endured a fistula and intolerable back and leg pain? This decision requires individual patient evaluation and great personal integrity. The radiologist should not let himself be urged into activity just for the appearance of "doing something *to*" the patient. It must always be "doing something *for*" the patient. Otherwise, he'll find himself "out of the frying pan, into the fire."

The results of palliative irradiation in carcinoma of the cervix, as listed in Table 3, show that 40% of patients treated obtained some relief. It is quite evident that large pelvic tumor masses do not respond. The one patient showing some palliation was treated with a radium needle implant through the vagina and supplemented with external irradiation. Bone pain has been satisfactorily treated with x-ray.

The number of patients with recurrent endometrial carcinoma is small but satisfactory results were obtained. Table 5 shows the very poor results in ovarian cancer. The volume that must be treated is very large so that it has not been clinically possible to deliver large daily doses of irradiation. In an attempt to obtain better results we have tried various combinations of different therapeutic agents, but, as tabulated, palliation in ovarian cancer is discouraging.

TABLE 3  
PALLIATIVE IRRADIATION  
OF THE CERVIX

Indications for Palliative Irradiation	Patients	Palliation		
		None	Fair	Good
Local recurrence	20	9	5	6
Pain	19	13	2	4
Bony metastasis with pain	4	1	2	1
Mass	6	5	1	0
Distant metastasis	1	1	0	0
TOTAL	50	29	10	11

TABLE 4  
PALLIATIVE IRRADIATION IN ENDOMETRIAL CANCER

Indications for Treatment	Patients Treated	Palliation				
		None	Fair	Good	Living	Dead
Vault recurrence	3	1	1	1	1	2
Bony metastasis	2	0	2	0	0	2
Unresectable	1	1	0	0	0	1
TOTAL	6	2	3	1	1	5

Survival:

Average 7 months  
Range 1-14 months



### Chemotherapy

Nitrogen mustard and the related compounds are cellular poisons and exert a specific nucleotoxic action by interfering with chromosomal mechanisms and mitotic division in a manner somewhat analogous to the effects of roentgen rays. The indications for the use of cytotoxic drugs is given in Table 6.

age and Thiotepe as tolerated seemed a little better. Cytoxan 40 mg./kg I. V. x 3, then 100 to 300 mg. orally q.i.d., has also been used. All patients receiving these chemicals should be followed with bi-weekly leukocyte and platelet counts. White counts below 2,000 and platelets under 60,000/cu. mm. require downward adjustment or temporary cessation of the dose.

TABLE 5  
PALLIATION IN OVARIAN CANCER

Type of Palliation	Patients	Palliation			Living	Dead
		None	Fair	Good		
X-ray only	11	9	1°	1	4	7
X-ray and isotope	4	3	1°	0	0	4
X-ray and chemotherapy	2	2	0	0	0	2
Isotope only	3	2	1°	0	0	3
Peritoneum 2						
Pleura 1						
TOTAL	20	16	3°	1	4	16
*Dead						
Average survival	6 months	Patients Palliation Achieved		Average survival	14 months	
Range	0-18 months	Range			7-18 months	

In the first two indications previous adequate x-ray therapy, which is generally considered a prerequisite, was not always given, but patients in the last three groups had all received irradiation before using the cytotoxic drugs.

Nitrogen mustard and Tem were administered to nine patients in the standard dosage of 0.4 to 0.6 mg./kg I. V., but results were poor. Chlorambucil orally in 10 to 30 mg./day dos-

Other side effects, such as nausea and vomiting, have been controlled by anti-emetics and alopecia has been temporary. It is interesting that some patients receiving chemicals appear more sensitive to x-ray, and at the present time we are exploring this possibility of combined chemical and x-ray therapy in carcinoma of the breast.

The results as given in Table 7 show that of the 19 patients treated, five showed clinical

TABLE 6  
INDICATIONS FOR USE OF CYTOTOXIC DRUGS

	Number of Patients Treated
Unresectable carcinoma	8
Unresectable carcinoma with ascites	4
Recurrent carcinoma with ascites	3
Recurrent carcinoma with distant metastasis	2
Recurrent carcinoma with mass pelvic or abdominal pain	2
TOTAL	19

TABLE 7  
CYTOTOXIC DRUGS USED IN TREATING INCURABLE PELVIC MALIGNANCY

Drug Used	Patients Treated	Number Showing Objective Improvement
Chlorambucil	3	2
Mustargen and Tem	9	0
Thiotepe	2	1
Cyclophosphamide	4	2°
Tetramin	1	0
TOTAL	19	5

\*Two patients were lost to follow-up at the time of this writing.

improvement. Most of these were ovarian carcinomas with ascites in which the recollection of peritoneal fluid was delayed for 6 to 10 months. Residual or recurrent tumor masses were not affected.

*Urinary Diversion*

All of these patients had carcinoma of the cervix. Inasmuch as ureteral obstruction and uremia account for a large number of deaths in cervical cancer, this is a highly select group.

Our criteria for selecting patients for this procedure are:

- 1. Little or no pain from their malignancy.
- 2. Death from extensive local or metastatic disease was not imminent.
- 3. The best combined clinical judgment indicated at least a longevity of three months.

The two indications for surgical intervention were ureteral obstruction and fistulae, the former being twice as frequent. As evident from Table 8, the survival time in patients with obstructive uropathy was less than one-half that of the other group.

specific problem presented by the patient. For patients with markedly elevated potassium levels, a pyelostomy was performed. In general, however, consideration should be given to patient comfort and ease of management post-operatively. Our experience makes us believe that transplantation of one or both ureters into the intact sigmoid colon is the best procedure for the majority of patients. All of these patients died of local or metastatic disease, none was lost because of progressive renal damage due to the procedure. No major electrolyte problems were encountered, possibly because of the small number of patients and the short survival time.

All patients with bowel obstruction secondary to malignancy were operated upon, usually by a simple sigmoid or transverse colostomy.

Rectovaginal fistula due to malignancy is a late manifestation, and so only three of 23 such patients were operated upon. Not listed in Table 10 are four surgically treated rectovaginal fistulae secondary to irradiation; all of

TABLE 8  
INDICATIONS FOR URINARY DIVERSION AND SURVIVAL TIME AFTER DIVERSION

Indication	Number	Survival (months)	
		Mean	Range
Ureteral obstruction	12	2.6	0-9
Fistulae			
Ureterovaginal	1	7	
Vesicovaginal	6	4.3	0.5-11
TOTAL	19	3.4	0-11

Several different shunting procedures were used which are listed in Table 9. The type of procedure selected was on the basis of the

these are still living and free of disease.

Fortunately, only one small bowel obstruction was encountered, and this was relieved by

TABLE 9  
PROCEDURES AND SURVIVAL TIME

Type of Diversion	Number Done	Survival (months)	
		Mean	Range
Ureterosigmoidostomy	5	2.9	0.75-7
Ileal conduit	1	11.0	
Wet colostomy	2	2.2	0.5-4
Pyelostomy	6	1.9	0-3
Cutaneous ureterostomy	5	4.6	2.5-9
TOTAL	19	3.4	0-11

TABLE 10  
BOWEL COMPLICATIONS AND THERAPY, INCLUDING SURVIVAL FIGURES

Complication	Total	Number Surgically Treated	Mean Survival after Surgical Therapy	Range Survival after Surgical Therapy
			(months)	(months)
Intestinal obstruction	9	9	3.5	0.5-12
Rectovaginal fistulae	23	3	1.7	0.3-4
Small bowel fistulae	1	1	1	
TOTAL	33	13		

ileocolostomy bypassing the obstructed area.

*Cordotomy*

In order for this procedure to be successful, the pain must be due to involvement of the lumbosacral plexus. The analysis of the type of pain and the decision for cordotomy have been that of the neurosurgeon, and that is why he likes to see these patients at an early date.

General considerations:

1. Duration and severity of pain. The patients that have received irradiation may have cystitis or proctitis, and a suitable period of time under appropriate therapy is allowed before final evaluation for cordotomy.
2. Stage of progress in use of pain-killing drugs. As long as codeine and aspirin relieve pain, no cordotomy is done; but if other factors are favorable when the step to opiates is made, cordotomy is indicated.
3. Expected length of life. This is a secondary consideration. The relief of the intractable pain at times seems to remove the desire to die, and a few of these patients take a new lease on life.
4. Positive neurological findings:
  - A. Some numbness of the leg
  - B. Weakness and depression of the deep reflexes.
5. Severe agonizing pain in the leg, which at times is described as a "deep ache" in the bone.
6. Thrombosis of the iliac vein. This usually means that there has been lymphatic infiltration to the lateral pelvic wall.

*Procedure*

In Table 11 it should be noted that all of these patients had cancer of the cervix and each had satisfactory or good palliation. The average time interval between initial therapy and cordotomy was about seven months longer than for palliative x-ray therapy.

A high bilateral thoracic cordotomy is now

done. Initially, a few unilateral procedures were carried out, but in each instance re-operation was required.

*Complications of Cordotomy*

1. Paresis of the legs occurred in six patients, with recovery in five. However, four patients who had this difficulty preoperatively were worse post-operatively.
2. Bladder atony occurred in two-thirds, necessitating an indwelling catheter.

It is quite striking that all of these 15 patients obtained relief.

*Hemorrhage*

This, as mentioned earlier, is a perplexing emergency situation and each patient has to be evaluated individually. When hemostasis is indicated, local radium, electrocoagulation, tight vaginal packing and external irradiation have all been used. For the cauliflower lesions oozing briskly, a local application of acetone has been most helpful in some patients. Ligation of the hypogastric arteries has been performed only once. The odor of necrotic lesions can be lessened by using a few drops of Neutroleum Alpha<sup>o</sup> on a vaginal pack.

*Narcotics*

Eventually, nearly all of these patients receive narcotics in the terminal phase. The generally accepted program of gradual step-like increase in dosage and drug used is followed when this stage has been reached. Each doctor has his own favorite program which in his hands gives the best results, and this should be followed.

*Summary*

Based on our experience, the following recommendations are made in order to achieve the best palliation of the indicated presenting symptom.

<sup>o</sup>Fritzische Brothers Inc.

TABLE 11  
CORDOTOMY

Patients treated	Age Range	Primary Site
15	25-70	15 Cervix
	Average	Range
Interval between initial treatment and cordotomy	25 months	2-63 months
Survival	5	2-11
Pre-operative palliation x-ray	4 patients	
Satisfactory or good palliation	15 patients	



1. Pain
  - A. Involvement of lumbosacral plexus—cordotomy.
  - B. Other pain—external irradiation.
2. Local recurrence—radium and x-ray.
3. Pelvic mass—radium volume implant and x-ray.
4. Ascites — intraperitoneal  $\text{NH}_2\text{oc}$  — isotopes.
5. Vesicovaginal fistula—surgery.
6. Hemorrhage—radium and x-ray.
7. Uremia—ureterosigmoidostomy.
8. Bowel obstruction—sigmoid or transverse colostomy.
9. Bone metastasis—x-ray.
10. Distant metastasis — no treatment or

chemicals; narcotics when indicated.

### Conclusion

Palliation is a delicate and complex art requiring all the medical and humane skill one possesses. The results cannot be scientifically measured. The philosophy of palliation is built upon the realization that human suffering is never finite, it can always grow a little worse. This phase of medicine is concerned with many different specialties so that a genuine personal interest combined with sound clinical judgment and technical proficiency are required. Each patient requires an individual approach, both psychologically and medically. Lastly, the patient's own problems and sufferings must be met with warmth and understanding.

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### REFERENCES

1. Kerr, H. and Elkins, H. B.: Carcinoma of the ovary. *Am. J. Roentgenol.* 66:184, 1951.
2. Kligerman, M. and Habif, D. V.: The use of radioactive gold in the treatment of effusion due to carcinomatosis of the pleura and peritoneum. *Am. J. Roentgenol.* 74:651, 1955.
3. Lenz, M.: Radiocurability of cancer. *Am. J. Roentgenol.* 67:428, 1952.
4. Munnell, E. W. and Bonnev, W. A., Jr.: Critical points of failure in the therapy of cancer of the cervix. A study of 250 recurrences. *Am. J. Obst. & Gynec.* 81:521, 1961.
5. Murphy, W. T. and Schmitz, A.: The results of re-irradiation in cancer of the cervix. *Radiology* 67:378, 1956.
6. Paterson, R.: The use and abuse of palliative radiotherapy. *J. Fac. Radiologists* 8:235, 1957.
7. Tod, M. C.: Place of x-ray therapy in the treatment of malignant ovarian tumors. *J. Obst. & Gynaec. Brit. Emp.* 58:385, 1951.
8. -----: An assessment of the palliation of advanced cancer obtained by simple radiotherapeutic methods. *J. Fac. Radiologists* 4:28, 1952.
9. Widmann, B. P.: The triumphs of palliation in radiation therapy. *Am. J. Roentgenol.* 65:685, 1951.
10. -----: The care of the incurable cancer patient. *Radiology* 61:215, 1953.

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*The premature infant in a community hospital* by W. M. Hart and A. W. Conerly (Florence) *J.A.M.A.* 177:357-361 August 12, 1961.

On January 1, 1950, a study of the premature infants cared for in a community hospital was initiated to improve the interest in care and survival of these babies. This study generated increased concern for these infants among the general practitioners, obstetricians, pediatricians, public health department nurses, and hospital administrators both in this hospital and in the surrounding area. The mortality rate was 21.6% for 1,748 premature infants, weighing 2,500 grams or less, cared for in 10 years. These results compared favorably with those in a teaching hospital and the national average when analyzed in terms of birth weight, race, and place of birth. An effective program for premature infants may be conducted by small hospitals as well as large ones when local interest is stimulated.

# THE ROLE OF MYLERAN IN ACUTE MYELOCYTIC LEUKEMIA

JOHN R. SAMPEY, Ph.D.

*Furman University, Greenville, South Carolina*

Myleran (busulfan) is considered the first choice by many hematologists in the control of chronic myelocytic leukemia.<sup>7</sup> In marked contrast, this drug does not appear in a recent review on the management of some 9,000 patients with acute myelocytic leukemia.<sup>8</sup> Equally intriguing is the suggestion of several investigators that Myleran may be a factor in the transformation of chronic myeloid leukemia into the myeloblastic phase. In an effort to find some answers of the role of Myleran in acute myelocytic leukemia, a careful search of the world literature since 1949 has been undertaken.

## *Role of Myleran in Transformations of Chronic into Acute Leukemia.*

Does the use of Myleran in chronic myelocytic leukemia hasten the transformation into the terminal myeloblastic phase? Ritz and Krim<sup>9</sup> reported that 8 of 12 patients treated for months with the drug died of acute myeloblastic leukemia, and they voiced the danger of this transition after busulfan therapy. Haut, and associates,<sup>4</sup> described development of the resistant form of acute myeloblastic leukemia in 15 of 30 patients, but they question if this 50% incidence of the acute form is any more frequent than before the advent of Myleran. Berovic, *et al*,<sup>1</sup> noted that only 1 of 15 patients developed the myeloblastic phase of chronic myeloid leukemia after prolonged remissions on Myleran. Gigante<sup>3</sup> described an unusual change of chronic myeloid leukemia to the acute form after Myleran therapy. Dul'tsin<sup>2</sup> observed the development of the acute phase in so many of his 50 patients that he raised the question if there is a threshold dose of the drug which should not be exceeded. Hyman and Hyman<sup>5</sup> conducted a second diagnosis upon patients with chronic myeloid leukemia who failed to respond to Myleran, and they found that some of these had the acute form of the disease.

## *Treatment of Acute Myelocytic Leukemia With Myleran.*

Heilmeyer, *et al*, recorded 7 good clinical remissions in 8 patients with acute myeloid leukemia who received Myleran, while the eighth suffered a brain hemorrhage. In 1957 Mukhamedzianova noted marked suppression of white cells in four of nine patients with acute and subacute myeloid leukemia after administration of Myleran, but the next year he observed no response in 7 children with myeloblastic leukemia. Pavlovsky described some brief remissions in 30 patients with acute leukemia who received Myleran and 6-mercaptopurine but details on the results are missing in the brief communication. Kozowska observed early hemorrhages in three children with acute paramyeloblastic leukemia who were given Myleran, but the survivals of from 160 to 362 days were noteworthy. Bousser and Christol reported that two patients with myeloblastic leukemia responded partially to Myleran. DiPietro and Gallico recorded an almost normal blood picture in a patient with myeloid leukemia in a hemocytoblastic attack who was placed on Myleran, but the improvement was brief. Galton found 1 patient with subacute myeloid leukemia underwent a fair response to Myleran.

The above limited response of acute myelocytic leukemia is offset in unfavorable reports by the majority of investigators who have sought to control this malignant disease with the drug which has proved most successful in the chronic form. Hansen reported that none of 15 patients with subacute myeloid leukemia responded satisfactorily to Myleran. Wagner observed no improvement in 4 patients with the acute form, while Turesson carried out 2 negative trials: in 1953 he recorded no improvement in 1 patient, and in 1957 he had poor responses in 3 patients with subacute myeloid leukemia. Storti and Pederzini and

Lorain, *et al*, all reported failures in 4 patients given Myleran. Ramioul failed to induce any improvement in 1 patient with acute myeloid leukemia, and DeVries noted no response in

1 subacute case. Videback and Mosbech concluded the drug was of little value in acute myeloid leukemia.

REFERENCES

References to investigations described in this review but not included in this bibliography may be obtained from the author.

1. Berovic, R., Konecni, J. and Bugarski, M.: Treatment of chronic myeloid leukemia with 1,4-butanediol dimethylsulfonylester (busulfan). *Srpski Arh. Celok. Lek.* 84: 571, 1956.
2. Dul'tsin, M. S.: Problems in therapy of leukoses. *Probl. Hematol* 4, #11, 1, 1959.
3. Gigante, D.: An unusual acute change of chronic myeloid leukemia following dimethanesulfoxybutane therapy. *Clin. terap.* 14: 469, 1958.
4. Haut, A., Abbott, W. S., Wintrobe, M. M., and Cartwright, G. E.: Busulfan in treatment of chronic myelocytic leukemia. Effect of long term intermittent therapy. *Blood* 17: 1, 1961.
5. Hyman, G. A. and Hyman, J. B.: Management of chronic myeloid leukemia in the young patient. *Proc. Am. A. Cancer Res.* 3: 122, 1960.
6. Ritz, N. D. and Krim, M.: Acute myeloblastic transformation after busulfan treatment of chronic myelocytic leukemia. *New York J. Med.* 59: 4602, 1959.
7. Sampey, J. R.: A decade of chemotherapeutic management of chronic granulocytic and chronic lymphocytic leukemia. *Am. J. Pharm.* 132: 145, 1960.
8. Sampey, J. R.: A decade of chemotherapeutic control of acute leukemia. *Internat. Rec. Med.* 173: 312, 1960.

The surgeon should pretend that he has no living (prebend) nor capital except his profession, and that everything is as dear as possible, especially drugs and ointment; that the fee is as nothing as compared with his services; and the wages of all other artisans, masons for example, have doubled of late. I repeat that the surgeon ought to charge the rich man as much as possible and get all he can out of them, provided that he does all that he can to cure the poor. You, then, surgeons, if you operate conscientiously upon the rich for a sufficient fee and upon the poor for charity, you ought not to fear the ravages of fire, nor of rain nor of wind; you need not take holy orders or make pilgrimages nor undertake any work of that kind, because by your science you can save your souls alive, live without poverty, and die in your houses.

—*Chirurgie de Maître Henri de Mondeville*,  
(1260-1320 A. D.)



# ACUTE CECITIS WITHOUT APPENDICITIS

## A CASE REPORT

CHARLES I. ALLEN, M. D.

*Laurens, S. C.*

Acute cecitis as an entity is rarely encountered in individual practice. The diagnosis is usually made at laparotomy, and the surgeon is faced with an immediate decision as to proper therapy. This problem has been recently encountered, and this case is being reported to illustrate some of the difficulties in diagnosis and management of a patient with acute cecitis.

A 21 year old Negro female was seen with a chief complaint of pain in the right lower quadrant of her abdomen for three days. The pain had been constant and was aggravated by activity. She had mild anorexia, but no nausea or vomiting. Her menstrual cycles had been irregular for the past 8 weeks. She had had a normal period approximately 8 weeks previously and for the past two to three weeks some vaginal spotting. She had had no urinary or bowel symptoms and her health had always been good. She had had no operations or episodes similar to the present illness.

Her temperature was 99.2° F. orally. She had right lower quadrant abdominal tenderness with muscle spasm and rebound tenderness. There was a palpable mass, approximately 6 by 4 cm., in the right lower quadrant. Peristalsis was present. On pelvic examination there was mild right adnexal tenderness, but no other abnormality. The rest of her physical examination was normal.

Laboratory studies were as follows: hemoglobin 12.4 grams; hematocrit 38%; WBC 8,300 with a differential of 2 Stabs, 77 Segmenters, and 20 Lymphocytes; urinalysis was normal; PA chest x-ray film and a flat x-ray view of the abdomen were normal.

It was felt that this patient had an appendiceal abscess. Under general anesthesia she was explored through a right lower quadrant incision. The appendix was entirely normal. There was an inflammatory process involving the cecum with woody induration of the cecal wall and multiple small, yellowish brown nodules on the surface. A portion of the omentum was attached to the cecum by fibrinous adhesions and these had to be divided in order to facilitate exposure. On the lateral wall of the cecum there was a small area that appeared dark and possibly necrotic. The ileum and ascending colon were normal. There were some enlarged mesenteric nodes which appeared to be inflammatory.

The problem now was to decide as to proper therapy. No facility for frozen section was available. In view of the patient's age, history, and gross appear-

ance of the lesion, it was felt that this was primarily an inflammatory process. Accordingly, it was decided to proceed with a cecal biopsy to include one of the small nodules and to culture the cecal area. This was done. The appendix was not disturbed. The abdomen was closed with a cigarette drain down to the lateral aspect of the cecum. The culture did not grow any organism. The pathological report was returned with diagnoses as follows:

Chronic inflammation of fibro-fatty tissue and section of omentum.

Focal necrosis and granulation tissue.

Focal granulomatous inflammatory reaction of omentum and fibro-fatty tissue.

The patient's postoperative course was uneventful. She was given procaine penicillin 600,000 units and streptomycin 0.5 gram every 12 hours for 6 days. She was afebrile and had minimal drainage. The drain was shortened on the 5th postoperative day and removed on the 6th. Her sutures were removed on the 7th postoperative day and she was discharged. A skin test with old tuberculin 1:1000 was negative. The final diagnosis was nonspecific inflammatory lesion of the cecum. Subsequent followup examinations have not revealed any abdominal or pelvic masses or tenderness, and she has had no symptoms referable to gastrointestinal or genitourinary tracts. A barium enema, 5 weeks postoperatively, showed no abnormalities.

This lesion is described throughout the literature by various names, such as ligneous cecitis, granuloma of ileocecal area, ligneous perityphlitis, and acute cecitis. Clinically the condition is most often confused with acute appendicitis or appendiceal abscess. Diagnosis is almost universally made at laparotomy. It is felt that the condition is caused by bacterial infection, and cultures have grown various organisms. No definite conclusion regarding a specific etiological agent has been reached. Pathologically there is submucosal cellulitis and lymphangitis. The muscularis and mucosa can be involved, but usually to a lesser extent. Occasionally there are small abscesses and areas of focal necrosis.

A preoperative diagnosis is rarely made and this is not important. Of major importance, however, is the differential diagnosis and management at the time of surgery. It is exceedingly difficult to differentiate this lesion from tumor. Many of the cases reported have had a radical ileocolic resection. Other cases have had biopsy or appendectomy or both. If the lesion is only inflammatory, I believe that radical resection is not warranted. A biopsy should be made and a positive diagnosis obtained. The patient can then be prepared adequately and resection done if

necessary. An inflammatory lesion will subside with conservative treatment. The postoperative barium enema x-ray study is generally normal. Whether the appendix should be removed at the time of initial surgery is debatable. An appendectomy can be done

with little danger provided there is no involvement of the base of the appendix. If there is any question about the diagnosis on these patients on followup evaluation, they should be explored again, properly prepared for definitive surgery.

#### REFERENCES

1. Bargen, J. A. and Jacobs, M. F.: Inflammatory cecal tumor, *Arch. Surg.* 20: 832, 1930.
2. Dean, M. L.: Acute cecitis, *J. Kentucky M. A.* 57: 54, 1959.
3. Emmett, R. O.: Acute inflammation of cecum, *Am. Surgeon* 20: 471, 1954.
4. McCarthy, C. F.: Acute phlegmonous caecitis, *J. Irish M. A.* 43: 272, 1958.
5. McGee, H. J.: Inflammatory fibroid polyps of the ileum and cecum, *Arch. Path.* 70: 203, 1960.
6. Mincks, J. R., Pulaski, E. J., & Beatty, C. L.: Unusual granulomas of the cecum, *Surgery* 41: 287, 1957.
7. Rex, J. C., Harrison, E. G., Jr., & Priestley, J. T.: Appendicitis and ligneous perityphlitis, *Arch. Surg.* 82: 735, 1961.
8. Riker, W. L., Gilchrist, R. K., & David, V. C.: Phlegmonous cecitis, Report of 2 cases, *Arch. Surg.* 58: 772, 1949.

*Research on the relation of smegma to cervical cancer*, by H. R. Pratt-Thomas, E. J. Dennis, H. O. Williamson, and R. R. Brown. (Charleston) (Proc. 4th Nat. Cancer Conf. 337-341, 1960).

This is an interim report concerning the experiences of this research team and their attempts to explain the relations of smegma and circumcision with carcinoma of the cervix and carcinoma of the penis. They have been unable to isolate a specific carcinogen from smegma and its mode of action remains in doubt. Chemical fractionation of smegma has not yielded a distinctive trend or outstanding activity in any of the portions. The cervical carcinogenic capabilities of smegma in mice is being further explored in twenty female Rhesus monkeys. The circumstantial evidence provided by clinical and environmental data that penile hygiene is related to carcinoma of the cervix

is extremely impressive and cannot be ignored. The data from animal experimentative, utilizing mice, in regard to smegma is certainly indicative of carcinogenic activity.

*Failure of treatment of acne vulgaris with hydrochlorothiazide* by Kathleen A. Riley, M. D. (Charleston) *A.M.A. Arch. of Derm.* 84:318 August 1961.

A study was done on 50 patients with acne vulgaris to evaluate hydrochlorothiazide therapy. All patients were put on a basic acne program and checked every two weeks for a period of two months. Alternating the patients, 25 were given hydrochlorothiazide, 25 mg., three times a day. The hydrochlorothiazide treated group did not show any appreciable improvement after two months over the control group.



## President's Page

It is my sincere wish that each and every member of this association and his family have the merriest Holiday Season ever. May we be able to face the incoming year with hope and faith that the American people who have enjoyed the freedoms over these years will not see fit to relinquish them now. May our earnest prayer be that Medicine may continue to care in the proper manner for the sick, and that the followers of the practice may ever hold dear the freedoms that they have enjoyed since the foundation of this, the greatest and freest Country in the world. And may we, as Physicians, discharge our obligations to this country of ours, as well as to our patients.

Charles N. Wyatt



# Editorials

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## **OPHTHALMOLOGY AND A NATIONAL FOUNDATION**

Of all the specialties ophthalmology probably comes nearer to general practice in all its ramifications than does any other. What specialty is so intimately concerned not only with its own particular organ or sphere but in addition with the central nervous system, the cardiovascular system, the genito-urinary system, and the glands of internal secretion? About the only area in which the eye is not more or less directly involved is the musculo-skeletal structure, and even here the eye and its external muscles often present problems which require the approach of the orthopedic surgeon. These relationships, of course, are what chiefly make the practice of ophthalmology truly challenging and ensure the interest of many developing young physicians. The number of those doing eye work today is probably increasing at a higher rate than that of any other specialty. Does this mean that we are going to have a superfluity of eye men? Not at all. In connection with the tremendous amount of research and development in ophthalmology it means that we are simply going to have, like it or not, more and more specialization within a specialty since it has become utterly impossible for one man to be highly competent in all things pertaining to the eye. He who tries to give the impression that he can do superbly all things in ophthalmology is soon going to find himself in embarrassing positions.

However the main purpose here is to show the growing importance of ophthalmology in relation to medicine as a whole. In this connection it is well for all doctors to realize that ophthalmologists as a group have been for years battling valiantly for medical practice and for the public against unscrupulous, grasping, and deceitful elements who are constantly attempting, for mercenary reasons, to cut in on the practice of medicine without sufficient qualifications.

The National Foundation for Eye Care,

headed up by Ralph Rychener, M. D. of Memphis, Tennessee and a well chosen board of directors, has been doing yeoman's service for ophthalmology and for medical practice in general. This organization keeps up with attempts at legislation to gain recognition by edict rather than by the education essential to proper qualifications; it is a clearing house for information regarding public relations; it furnishes means for the dissemination of information as to medical responsibilities and problems; it is making invaluable efforts to inform the public and the profession about serious matters that affect them both. Certainly every practicing ophthalmologist should support this organization, and every doctor of medicine should give it his moral and verbal help if indeed he does not wish to contribute of his time and money.

J. W. J.

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## **PROPHET IN HIS OWN COUNTRY**

Until relatively recent years one rarely ever heard of a testimonial dinner being given to anyone save as a posthumous compliment which did no particular good to anyone at all. Nowadays, however, this sort of thing is more commonly done while life is still worth living, and when properly proffered, which is the usual case, it is a most happy occasion for all concerned.

The Greenville County Medical Society recently honored our president Dr. Charles N. Wyatt with a dinner at the Poinsett Club. There were visitors from far and near and many kind things and truths were said. There was no maudlin mush, the proof of which is that "Tumboli" sat through the entire performance making no effort to escape. This he would certainly have done had he considered that there was too much of a muchness. As it was the evening was a great success and Charlie was presented by the hosts with a very handsome silver tray properly inscribed as a token of affection and appreciation.

There should be more of the same when it

can be kept on the high level of love and sincerity obviously apparent on this occasion. It is good especially for two very excellent reasons; first, because we still have in this dear old world men with the character to deserve the accolades their colleagues wish to bestow; and second, because there are so many who with "meek heart and due reverence" help all wittingly and willingly to make such affairs possible by their unselfish respect and regard for a fellow man. We have seen this and it is good.

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### COMMUNICATIONS IN MEDICINE

This is the title of an article published in the September 5, 1961 issue of *New York Medicine* and delivered by Brig. Gen. David Sarnoff, Chairman of the Board of the Radio Corp. of America. Gen. Sarnoff believes that modern methods of communication can make a tremendous contribution to the improvement of medicine. He cites the well-known facts that journals are numerous and multiplying daily, having reached the number of about 8000 now in the world, that books are spouting from the presses, and that the problem of storage and codification are constantly mounting in all libraries. He visualizes a state in which all of this tremendous amount of information may be gathered together and made available at the push of a button to physicians all over the world.

Since the busy doctor can not possibly hope to keep up with the numerous journals, he might still manage to sit in on a radio program which Gen. Sarnoff would call *The Medical Journal of the Air*. This would be a closed circuit, to be shown at a specified time in all centers of any size, and would be carefully edited and produced under the best medical auspices. Such a method would bring to the physician the latest words in medicine, and would avoid that inevitably long lag which now must elapse before important medical messages can spread widely.

In addition to this radio program, Gen. Sarnoff would like to see a television production which would be called *A Medical School of*

*the World*. Already 25 schools are using television for teaching purposes, and the many possibilities of intramural use of this medium is now being realized. Such a production would allow the demonstration of techniques in color, and would open the air for the dissemination of incalculably valuable and up-to-date information.

The third way in which modern communications might help medicine would be through the use of computers, thereby eliminating the drudgery and expense of prolonged classification analysis, and storage. The marvels of the electric brain are well-known to most people, and the possibilities in this field would be enormous. Already some such machines have been put to use in the larger libraries, but a larger operation which would include an almost unlimited geographical field would be of far greater value to medicine in general.

The General has three excellent points which may well be implemented within our own time.

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### LIFE INSURANCE PROGRAM

A letter sent by the Insurance Committee of the South Carolina Medical Association indicates that there is still lacking a necessary number to put the newly recommended insurance program into effect. Implementation of the plan requires that 40% of eligible members apply. So far only 35% have sent in their applications. In order to make the program effective at an early date, it is hoped that all those who are eligible and desire the insurance will apply immediately. Any information not available to you may be obtained from Joseph P. Cain, M. D., Chairman of the Insurance Committee, Mullins, S. C.

### LEAD PELLET INJURIES

Anyone who has seen injuries from lead pellets is kindly requested to send information concerning these injuries to J. W. Jervy, M. D., 709 Dunbar St., Greenville. Dr. Jervy is chairman of a committee studying lead pellet injuries.

**Minutes of Council Meeting**  
**Columbia, S. C.**  
**October 18, 1961**

A special meeting of Council was held at the Columbia Hotel on October 18, 1961. The meeting was called to order at 2 p. m. by the Chairman, Dr. John Brewer. Members present were Drs. Eaddy, Booker, Perry, Cain, Burnside, Waring, Stokes, Gressette, Scurry, Evatt, Wyatt, Wilson, Thomas, Cone and Mr. M. L. Meadors.

The minutes of the several meetings of Council held in May 1961 during the annual session of the State Association in Charleston were approved as read.

Dr. Henry W. Moore, Chairman of the Committee on Accident Prevention, presented a report on the work of the Committee and asked for authority from Council to establish the Committee on a permanent basis and give authority to proceed along several recommended lines. After considerable discussion the following motion was approved: Council recommends to the House of Delegates that the Committee on Accident Prevention be made a permanent committee of the Association; that this committee be composed of seven members as follows: (a) The Chairman of the Committee on Accident Prevention of the S. C. Chapter of the American Academy of Pediatrics; (b) Six other members of the committee, two appointed for a one year term, two appointed for a two year term, and two for a three year term, with subsequent appointments for three years; that the function of this committee be to make recommendations in the spheres of education both to the medical profession and to the general public; that the further function of this committee be cooperation after consultation with Council with the S. C. Highway Department, the S. C. Industrial Commission, Civilian Defense, and the Health Insurance Council; cooperation with the Advisory Committee to the Maternal and Child Health Division of the S. C. State Board of Health in its accident prevention program, and the development and recommendation, after approval by Council, of accident prevention legislation to the State Legislative Committee of the State Medical Association; all activities of this committee to be subject to the approval of Council before action might be taken in any of the spheres of its activity.

A further motion was adopted that Council authorize the present committee to function in the above capacities until the next meeting of the House of Delegates.

Dr. Frank Owens made an interim report of the special committee for the Study of the Salary Structure of the State Medical Association, which was received as information.

Dr. Owens further reported on the present status of Selective Service and noted that there may well develop some problems in this area. On motion the President of the Association was authorized to replace

any members of the Medical Advisory Committee to Selective Service at his discretion, in consultation with Dr. Owens, to serve on a standby, temporary service until the next meeting of the House of Delegates. Dr. Owens then commented on the Industrial Fee Schedule, which had been approved by the Special Committee of the State Medical Association. It was noted that the S. C. Chamber of Commerce had accepted the proposed schedule, and Dr. Wyatt stated that the schedule was now in the hands of the Industrial Commission. On motion by Dr. J. P. Cain, Dr. Wyatt was directed to find out the present status of the schedule by inquiry from the State Industrial Commission.

Dr. Owens then commented on the present trend to urge legislation for allowing physicians to Incorporate, either alone or in association with other physicians. Mr. M. L. Meadors pointed out the various actions by different states in this activity, and a general discussion followed. It was pointed out that such an action would probably mean the corporate practice of medicine. On motion by Dr. Booker, the Chairman of Council was directed to appoint a Committee of three members of Council to consider the matter further, along with the Executive Secretary, ex-officio.

Dr. Wyatt reported that the renewal of the contract with Medicare was up for consideration, and included in the new contract were specific agreements not to distribute the fee schedule to members of the Association, and an agreement to follow the practice of non-discrimination because of race, color or creed. After considerable discussion Dr. J. P. Cain, Jr. moved that the question of the renewal of the Medicare contract be referred to the House of Delegates without recommendation. This motion was carried, and it was further directed that an extension of the previous contract be requested until the next meeting of the House of Delegates in May 1962.

Mr. M. L. Meadors was then re-elected Executive Secretary for the calendar year 1962, and Dr. J. I. Waring was re-elected Editor for the same period.

Dr. J. P. Cain reported for the Insurance Committee and spoke of the various insurance programs of the S. C. Medical Association. He presented a new program, underwritten by the Educators Mutual Insurance Company, to cover health and accident insurance at a lower rate, with some differential between those over 40 years of age and under 40. This program was approved by Council.

Dr. J. I. Waring reported that the income of the Journal from advertising was considerably less than it had been in the previous year. He spoke of the activities in the field of Public Relations, and made a suggestion that the Program Committee be asked to have the completed program prepared at least 60 days before the date of the meeting to facilitate its publication. This was approved by Council.

Dr. Booker then presented the matter of a Good Samaritan clause for the state, and this was referred to the Committee on Legislation for preparation.



The following budget was then adopted for the calendar year 1962.

#### Secretary

Office help	\$ 900.00	
Office expense	600.00	
Travel	500.00	
Total		\$ 2,000.00

#### Treasurer

\$ 100.00 \$ 100.00

#### Journal

Office expense	\$ 3,000.00	
Editor's Salary	3,000.00	
Adv. Mgr. Salary	1,200.00	
Printing	25,000.00	
Total		\$32,200.00

#### Executive Secretary

Salary	\$10,000.00	
Office help	7,500.00	
Travel	2,000.00	
Rent	1,700.00	
News Letter	800.00	
Office supplies	1,500.00	
Tel. and Tel.	2,000.00	
Conf. & P. R.	750.00	
Insurance	800.00	
Postage	1,000.00	
Total		\$28,050.00

#### Delegates of A. M. A.

Travel	\$ 1,800.00	\$ 1,800.00
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*President's Expense* \$ 1,200.00 \$ 1,200.00

#### General Expenses

Woman's Auxiliary	\$ 1,500.00	
President's Gift	200.00	
Infant and Child Health	200.00	
Historical Committee	500.00	
Maternal Welfare	200.00	
Contingent Fund	1,500.00	
Civil Defense	500.00	
Auxiliary Bulletin	1,000.00	
Medico-Legal	2,000.00	
Directories	2,000.00	
P. R. Committee	2,500.00	
Taxes	750.00	
Misc. Com. Expense	500.00	
Benevolence Fund	1,000.00	
Hosp. by State at AMA	500.00	
Total		\$14,850.00
		\$80,200.00

After the adoption of the budget Dr. J. P. Cain moved that the S. C. Medical Association give to the American Medical Education Foundation the sum of \$2,500.00. This motion was carried.

There was no further business and Council adjourned at 6:10 p. m.

Respectfully submitted,

Robert Wilson, M. D.

Secretary

## News

### Medical College Alumni Honor Dr. K. M. Lynch

Alumni of the Medical College of South Carolina paid tribute November 7 to Chancellor Kenneth M. Lynch of Charleston at a dinner at the Adolphus Hotel in Birmingham.

Dr. Jack C. Norris of Atlanta, secretary of the alumni group, said Chancellor Lynch "had developed the Medical College over the past 35 years and brought it to its present position of leadership among Southern medical institutions." The tribute highlighted a Southern Medical Association meeting.

Dr. Norris noted that the expansion program of the schools of medicine, dentistry, pharmacy and nursing totaled some \$20 million.

Dr. Lynch spoke to the alumni on "The Future of Our Past."

The Medical College of South Carolina, founded in 1824, is one of the nation's oldest, and graduates some 75 medical students yearly.

### Dr. Hampton's Experiences in France

The Frenchman judges his physical being largely by the state of his liver and not by his heart, as does

the contemporary American. This discovery was made by Dr. Ambrose G. Hampton, Jr., who has recently returned to Columbia from two years service as a member of the staff of the American Hospital in Paris.

Dr. Hampton said that in his experience he found little difference in liver health between Frenchmen and Americans, but the French, enjoying food as they do, are forever concerned about their digestive capacity.

According to Dr. Hampton the French medical approach, while good, is quite different in some respects from that in the United States. The use of drugs there is much more profuse than in American medicine. "A French physician's prescription is that long," Dr. Hampton says, separating his hands about 12 inches to suggest the size of a doctor's order to the pharmacist in France. "Also, the French patient demands from his physician a stated regimen. He wants a diet prescribed. He demands an order for a rest. What 'cure' should he take, what spa should he retire to?" The French patient is accustomed to this sort of pattern and the average physician tolerates it even if he may have some modern misgivings about it all.

French surgery is especially good, Dr. Hampton says, and so is progress there in neurology and immunology.

The American Hospital where Dr. Hampton was stationed as a member of the staff is endowed by American individuals and corporations. It is a well equipped institution of 120 beds, 40 of which, on an average, are occupied by Americans, with the other 80 used by French and other nationals. All manner of persons are treated there from indigent vagrants to princesses and potentates. French and English are the standard languages of the staff, but with patients of other nationalities much interpreting is done—most of it by White Russian nurses.

Dr. Hampton is now practicing internal medicine in Columbia with Dr. Hugh H. DuBose and Dr. James C. Vardell, Jr.

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### **Dr. Siegling Elected**

Dr. J. A. Siegling of Charleston has been elected Chairman of the Technical Advisory Committee of the Crippled Children's Division of the State Board of Health.

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### **Dr. Ethel Madden Honored**

Ethel Mae Madden, M. D. was chosen by the Columbia Business and Professional Women's Club for special recognition at the Civic Night banquet in October.

Dr. Madden began the practice of pediatrics in Columbia in 1943 and has been a member of the Columbia BPW Club since 1945. She has been an active and valuable participant on many committee assignments and has served as first vice president of the Club. The tribute extended her at the banquet was an expression of appreciation from the entire organization.

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### **New County Physician**

Dr. James Pennell of Anderson was named county physician at a meeting of the Board of County Commissioners. Dr. Pennell succeeds Dr. Charles Griffin, of Pendleton.

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### **Physician Moves To Darlington**

Dr. John H. Boulware became affiliated with the Coleman-Aimar clinic in Darlington September 1.

He is associated with Dr. Marshall J. Coleman and Dr. Charles Aimar, in the general practice of medicine and surgery.

Dr. Boulware received his doctorate in medicine from the Medical College of South Carolina, served his internship at the McLeod Infirmary in Florence, and spent one year at the American Hospital in Paris, France.

During the Korean conflict he was a captain in the United States Air Force Medical Corps. Upon his release, he practiced for five years in Atlanta.

He has been serving as assistant medical director at Louisiana State University and for the past two years completed a residence in preventive medicine

and public health with the Virginia State Department of Health.

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### **Dr. Coggeshall Is New Surgeon At Chesterfield**

Dr. B. E. ("Ted") Coggeshall, Jr., native of Darlington, is the new surgeon at the Chesterfield County Memorial Hospital. Dr. Coggeshall comes here from two years practice in general surgery at Baton Rouge, La.

He received his medical degree from Duke Medical School, did his internship at Philadelphia General Hospital, and after two years as army surgeon, took up his residency in surgery at Tulane Medical School and Charity Hospital in New Orleans.

He was in residency for four years and then became associated with a clinic in the Louisiana capital for two years.

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### **Dr. D. E. Saunders To Practice In Columbia**

Dr. Donald E. Saunders, Jr., has begun practice of cardiology and internal medicine in association with Dr. C. Warren Irvin, Jr., in Columbia.

Dr. Saunders, a native of Columbia graduated magna cum laude from the University of South Carolina where he was elected to Phi Beta Kappa and Omicron Delta Kappa honor fraternities.

He graduated first in his class from Duke University School of Medicine and was elected to Alpha Omega Alpha medical scholarship fraternity and received the Merck scholarship award.

Following graduation from Duke, Dr. Sanders was an intern in pediatrics for three months and an intern in internal medicine for one year at Duke Hospital. During the following two years he was on the resident staff in internal medicine at the Johns Hopkins Hospital and Duke Hospital, and from 1958 to 1960 served as Captain in the U. S. Air Force with a specialist rating in internal medicine.

Dr. Saunders was assigned to the teaching staff in the Cardiovascular Disease Section of the 1,000 bed Lackland Hospital, which serves as the primary consultation hospital for the U. S. A. F., just as Walter Reed does for the Army.

Following discharge he was awarded a U. S. Public Health Service Research and Training Grant for an additional year's work in cardiology at the National Heart Hospital in London, England, under Dr. Paul Wood, author of a leading textbook in the field of cardiology. Dr. Saunders has authored scientific papers dealing with aspects of cardiovascular disease.

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### **Dr. D. H. Smith**

Dr. Dwight H. Smith of Williamston, S. C. was among the first five physicians in the nation to satisfactorily complete "Legal Problems in the Practice of Medicine," the first home-study course in the U. S. designed to help physicians gain some understanding of the American legal system and how it affects the practice of medicine. Over 150 physicians from more than 35 states are enrolled in the course, which is

sponsored by A. M. A. and was developed by three attorneys associated with national professional associations. The attorneys are serving as commentator-instructors.

Dr. Smith, a graduate of the Medical College of South Carolina, is engaged in general practice in Williamston and is head of the Williamston Hospital.

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### **Dr. Watson Heads Board For Children**

Dr. David F. Watson of Greenville has been elected chairman of the board of directors of the Children's Bureau of South Carolina.

Dr. Watson has served on the state agency since August of 1958. He succeeds H. L. Sneed, Jr. of Chester as chairman of the agency which supervises child welfare.

A Ridge Spring native, Watson has been chairman of the Children's Bureau Finance Committee.

A gynecologist and obstetrician, Dr. Watson serves as medical consultant to the South Carolina State Agency of Vocational Rehabilitation.

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### **Dr. Lawson Wins Wyeth Fellowship**

Dr. J. Rutledge Lawson of Sumter has been awarded a Wyeth Laboratories residence fellowship in pediatrics.

The Wyeth Fund for Postgraduate Medical Education provides grants of \$4,800 each to 20 physicians annually, enabling them to devote two years of advanced study in the care and treatment of children. This year's recipients come from 15 states, Canada and Puerto Rico.

Dr. Lawson was graduated from the Medical College of South Carolina and served his internship at the Medical College Hospital. He will take his fellowship at Bowman-Gray Medical School and the North Carolina Baptist Hospital at Winston-Salem.

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### **Piedmont Post-Graduate Clinical Group Elects Dr. Burley, Clemson**

Dr. Robert H. Burley of Clemson has been named president of the Piedmont Post-Graduate Clinical Assembly, succeeding Dr. George V. Rosenberg of Abbeville.

Other officers are Dr. Charles H. Browne of Anderson, executive vice president; Dr. William R. Craig of Greenville, vice president; Dr. Lane Mays of Seneca, vice president; Dr. Ned Camp of Anderson, reelected secretary-treasurer, and Dr. Bill Hunter of Clemson, reelected registrar.

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### **Dr. John H. Porter**

The Andrews City Council has passed a resolution naming an old city street in memory of the late Dr. John H. Porter. Formerly called Railroad Street, because it starts at the railroad depot, the street will be officially named Porter Boulevard and will be given a new look, as a five block stretch will be made into a dual lane roadway and the remainder of the mile length will be paved.

### **Army Calls Seneca Doctor**

Seneca's newest doctor has been called into active service by the United States Army.

Dr. O. Norman Evans, who was associated with Dr. Lane Mays and Dr. Hugh Wells in the Medical Clinic, left August 30 for Tacoma, Washington, where he enters active service.

His departure leaves Seneca in the same shape numerically as it was when the Chamber of Commerce initiated its search last spring for two additional physicians.

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### **Dr. Ben Wyman, Jr. Opens Office in Calhoun Falls**

Dr. Ben F. Wyman, Jr., a graduate of the Medical College of South Carolina, has opened his office for medical practice in Calhoun Falls in the Tate Clinic Building.

Dr. Wyman comes from a general practice in Swansee and Irmo for the past 18 months.

He served his internship at Galveston, Texas. He was a resident in public health in Florida.

He also was a psychiatrist in the State Hospital in Columbia for eight years.

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### **Oconee Gives Scholarship**

The first scholarship awarded by the Oconee County Medical Society to a high school senior planning to study pre-medicine in college has been awarded to Melvin L. Martin of Blue Ridge High School, the only Negro high school in Oconee County.

The \$300.00 scholarship runs from semester to semester and can be kept as long as the recipient stays in pre-medicine and maintains a "B" average.

Martin, who was an honor graduate of the Blue Ridge High School last year and one of the school's top graduates in many years, was selected from numerous applications that were turned in by area superintendents to the scholarship committee of the society.

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### **Doctor Draft Act**

Following the recent Council meeting Dr. Frank Owens communicated with Colonel Collins of State Selected Service Headquarters. He advised that there has been a national call for approximately five hundred doctors. This call is under the regular Draft Act as the Doctor Act is no longer in existence. This means that the call is for doctors under twenty-seven years of age. This state has what is known as an open call; that is, no specific number of doctors are requested, but all doctors under twenty-seven and non-fathers who are eligible would be called. As it happens, there are five in this state who meet those requirements. One doctor in South Carolina has been called and four will presumably be accepted.

The re-evaluation of doctors by the Draft Board is probably in anticipation of future legislation.





Photo by E. S. Powell

Officers of the South Carolina Obstetrical and Gynecological Society. Left to right: Dr. James M. Wilson, newly elected president; Dr. Rowland F. Zeigler, past president; Dr. J. Richard Sosnowski, secretary-treasurer.



Photo by E. S. Powell

Officers of the South Carolina Chapter of the Academy of General Practice. Left to right: Dr. H. M. Whitworth, Jr., Greenville; Dr. Swift Black, Dillon, President; Dr. I. Ripon Wilson, Charleston.

## Announcements

### Public Health Service Examinations

Competitive Examinations for appointment of physicians as Medical Officers in the Regular Corps of the United States Public Health Service Commissioned Corps will be held throughout the United States February 13-15, 1962.

Appointments provide opportunities for career service in clinical medicine, research, and preventive medicine—public health, with remuneration starting as Assistant Surgeon (equal to Navy rank Lieutenant, j. g.) or Senior Assistant Surgeon (equivalent to a Navy Lieutenant).

Requirements are U. S. citizenship, and graduation from a recognized school of medicine. For the rank of Assistant Surgeon the applicant must be under 34 years of age and have had seven years of collegiate and professional training. For Senior Assistant Surgeon the applicant must be under 37 and have an additional three years of professional training and experience.

Application forms may be obtained by writing to the Surgeon General, United States Public Health Service (p), Washington 25, D. C. Completed application forms must be received no later than January 5, 1962.

### Films Available

Two new 16 mm. black and white sound films have become available for showing at meetings of medical societies and other allied groups: They are *Medifilm Report III* and *The Next Step*.

*Medifilm Report III* presents highlights of the A.M.A.'s 110th Annual Meeting and may be obtained by writing the Motion Picture Library, A.M.A., 535 North Dearborn St., Chicago 10, or the Audio-Visual Department, Schering Corp., Union, N. J.

*The Next Step* gives detailed information on the development of the live, oral poliovirus vaccine now pending licensure for general use in the U. S. It may be reserved (preferably three weeks in advance) by writing Pfizer Laboratories, Div., Chas. Pfizer & Co., Inc., 235 East 42nd St., New York 17, N. Y.

### Columbia Medical Society

The Columbia Medical Society is honored to have as guest speaker for its January Scientific Meeting Dr. Charles N. Wyatt, President of the South Carolina Medical Association. Dr. Wyatt will address the group on the subject "Responsibilities".

The local speaker will be Dr. George W. Smith of Columbia, who will speak on "Protection Against Nuclear Weapons".

New officers of the Columbia Medical Society will also be installed at this meeting. Present officers are: Dr. Weston C. Cook, President; Dr. Joe E. Freed, Vice-President; Dr. James T. Green, President-Elect; Dr. Charles R. Sloan, Secretary; Dr. Waitus O. Tanner, Treasurer; and Dr. P. F. LaBorde, Editor of *The Recorder*.

The meeting will be held at the Columbia Hotel, Monday, January 8, 1962, at 7:00 P. M. All interested physicians are invited to attend.



### Dr. John Lining's House

John Lining of Charleston was an eminent practitioner and investigator of the mid-eighteenth century. His metabolic experiments, his weather observations, and his early description of yellow fever have made for him a firm place in our medical history.

For some years of his career he lived in one of the

oldest (built about 1738) surviving houses of Charleston, at the northwest corner of King and Broad Streets, a house used for a great succession of years and up to a few years ago as an apothecary shop, and intermittently in addition as a physician's office. Threats of demolition of this old building aroused Charleston's Preservation Society to a rapid campaign for securing funds toward saving and restoring the building. A considerable sum of about \$60,000 was raised, purchase has been completed, and restoration is in progress.

The Preservation Society plans to restore a part of the first floor of the house as a drugstore museum. To do this, they will copy the original interior wood work and shelves of the old drugstore, which is housed in the Charleston Museum, and they hope to obtain from the museum the vintage furnishings which once equipped the shop.

Insufficient funds prevent the Society from completing all the restoration work at this time. However, they plan to have the outside, door, front hall and stairway finished by Christmas.

### MEDICAL TELEVISION

Via South Carolina's Closed Circuit  
TV Network

#### *The Lump in the Breast*

January 4, 5 (8:00 - 9:30 p. m.)

Panel: Drs. John Hawk, Harold Pettit, Forde McIver

Moderator: Dr. Dale Groom

Guest: Dr. Jerome Urban of New York City

### MEDICAL LEGAL FORMS

A booklet on "Medico-Legal Forms" showing acceptable wording for such papers and giving analysis of the many legal questions involved has been published by the AMA. Single copies are available without cost from the Law Department, Bernard D. Hirsh, Director.

## Deaths

### DR. GRADY S. CLINKSCALES

Dr. Grady Sebastian Clinkscales died at his home in Anderson, South Carolina on October 26, 1961 after an illness of about six months. Dr. Clinkscales began practice in Anderson in 1919 and practiced there continuously up until the time he was taken sick. He was vitally interested in tuberculosis and served for 40 years as clinician for the Anderson County Tuberculosis Association. In his early years, he was also clinician for the State Tuberculosis Association.

Dr. Clinkscales was born at Starr, South Carolina, March 2, 1890. He attended Furman University and was graduated from Vanderbilt University School of Medicine in 1916. He trained at Ellis Island and Vassar Brothers Hospital, Poughkeepsie, New York. He served in France in the Medical Corps during World War I and after the war, he took postgraduate work at the University of Edinburgh, Scotland.

Dr. Clinkscales was quite active in the Medical

Reserve Corps and retired as Lieutenant Colonel in 1950.

### DR. W. R. TUTEN

Dr. W. R. Tuten, 72, of Fairfax died November 10, 1961.

Dr. Tuten died at his home after a short illness.

He was born in Ulmrs March 23, 1889. He attended the Orangeburg Collegiate Institute and the College of Charleston. After his graduation from the Medical College of South Carolina in 1911, he practiced medicine in Fairfax until the time of his death.

Dr. Tuten served as president of the South Carolina Medical Association in 1950 and vice president in 1948. He was also a past president of the local and district medical societies.

At the time of his death, he was a member of the South Carolina Board of Medical Examiners.

He served as mayor of Fairfax for 12 years.

# Public Relations

## South Carolina Public Relations

This letter has been sent to the Presidents and Secretaries of participating county societies.

Dear Dr. -----

We are planning to initiate a new phase in the public relations program of the S. C. Medical Association.

Our medium will be radio. Briefly, the basic plan is as follows:

Radio stations are required by law to program a certain number of hours in public service announcements.

We will tape a series of three-minute announcements on topics of concern to the medical profession and their communities. These tapes will then be distributed to stations throughout the state.

There will be no charge for air time, and as the stations are usually glad to receive public service material with local interest value, the State Association will have a varied and large audience.

To gain maximum benefit from these programs, local physicians should be heard in their own areas. In so far as possible, we would like to handle the production here in Charleston, where we have access to excellent technical advice and facilities.

When it is impossible for someone to make a trip to Charleston, the introduction and closing will be done here. The physician may then have his part taped locally and the radio station there will send this to us for inclusion on the master tape.

We hope, with the help of the local societies, to prepare scripts on area matters. In other words . . . scripts custom-tailored to your community activities. We will need the societies' cooperation in gathering these facts. There will also be one or two general spots on government-controlled medicine for state-wide use. But here again, we would prefer to have a local voice.

On a separate sheet we have listed stations we plan to use in your area, along with a list of suggested topics. We will appreciate it if you will check this list adding other stations or topics you would like to include.

We would also like to have your suggestions on physicians in your area who would be able to participate in the actual taping. We would endeavor to have a six-month supply of scripts for a single taping so they would not be bothered frequently.

In closing, let me add that this project *does not* take the place of the speakers bureaus, and we will be glad to help there in any way that we can.

Sincerely,

J. I. Waring, M. D.

## The View From The Plain

One of the preoccupations of our times is to view our corporate image. None escape—our nation, our cities, and our businesses and professions are all under scrutiny in this regard. There are serious lessons to be learned from this modern type of narcissism.

A recent private poll by the editor of one of our large daily papers in this State asked the question, "What do you think of doctors?" The editor asked this question personally of random subscribers and friends.

Surprisingly enough, criticism was directed not particularly to the actions or inactions of organized medicine but to the individual doctor's conduct of his practice. Almost universal were the complaints of lack of a warm, understanding contact with the physician, wholesale referral to specialists, particularly for simple, uncomplicated conditions, and high costs, including hospitalization and drug costs which are largely out of the control of the doctor.

Numerous were the complaints of inability to get the doctor "when I want him." This was not a night call problem but one which happened during the business hours of the day. "The doctor is not punctual" was often heard. Sad to relate, there was some criticism of an occasional one of our own who loaded on an extra fee to insurance service benefits which had been firmly agreed on.

There was much praise too for skill and competence. The people like and admire *what* we do, but they are less than enthusiastic about *how* we do it.

The corporate image is the sum total of the individual images. We will *look* better when we *are* better.

Tightening up in extravagances in hospitalization and drug prescribing, closer attention to our patients and a human, holistic approach to their problems, and prudence in referral would please our patients and might not do us a bit of harm as we face into the winds of change.

(Reprinted with permission of the New York State Journal of Medicine from its issue of July 1, 1961.)

## Louis Bauer, M. D., Past President of AMA Spells Out Provisions of Magna Charter For Medicine at AMA Meeting

There were five resolutions in opposition to the King-Anderson bill (H.R. 4222).

Then Dr. Bauer came to the podium to introduce an amendment. As Dr. Bauer finished, there was a thunderous burst of applause. The motion was carried unanimously by acclaim. This is it:

**"The House of Delegates of the American Medical Association records its opposition to any legislation of the King-Anderson type. Its opposition**



is based on the facts that such legislation does not meet the needs of the situation; interferes with the doctor-patient relationship; interferes with the rights of doctors employed in hospitals; is inordinately expensive; leads inevitably to further encroachments by government into medical care; results eventually in a deterioration of the type of medical care rendered the public; and is therefore detrimental to the public interest.

"The House of Delegates invites attention to the fact that the medical profession is the only group which can render medical care under any system and that the medical profession is best qualified to determine how the best medical care can be delivered.

"The House of Delegates believes that the medical profession will see to it that every person receives the best available medical care regardless of his ability to pay, and it further believes that the profession will render that care according to the system it believes is in the public interest and that it will not be a party to implementing any system which is un-American and detrimental to the public welfare."

Here is American Medicine's Magna Charter. In this declaration, so warmly received by the delegates from the 50 States, there is at last spelled out the firm position of the practicing physicians of this Nation. Here is the statement of free men and women. They declare their right to practice medicine as they believe it should be practiced. Without naming names they let the world know that no plumber can tell a physician how to deliver a baby, remove an appendix, or resect a colon.

Medicine in this country cannot be nationalized if physicians refuse to become Government contract doctors. Each physician is the master of his fate, the captain of his soul.

*Challenge To Socialism*

## The House Call

Living in communities where physicians continue to make house calls at night, South Carolinians may not appreciate the problems of patients in big cities where the practice is vanishing.

In many large metropolitan areas, the task of getting a doctor to come to one's home at night is difficult, if not impossible. Some physicians argue that the house call is outmoded. This point of view was presented by Dr. Phoebe Hudson in a recent issue of *Medical Economics*.

"House calls," she wrote, "for the most part, are as outdated as the horse and buggy. They're a left over from the days when most people didn't have cars and when doctors had to go to patients' homes."

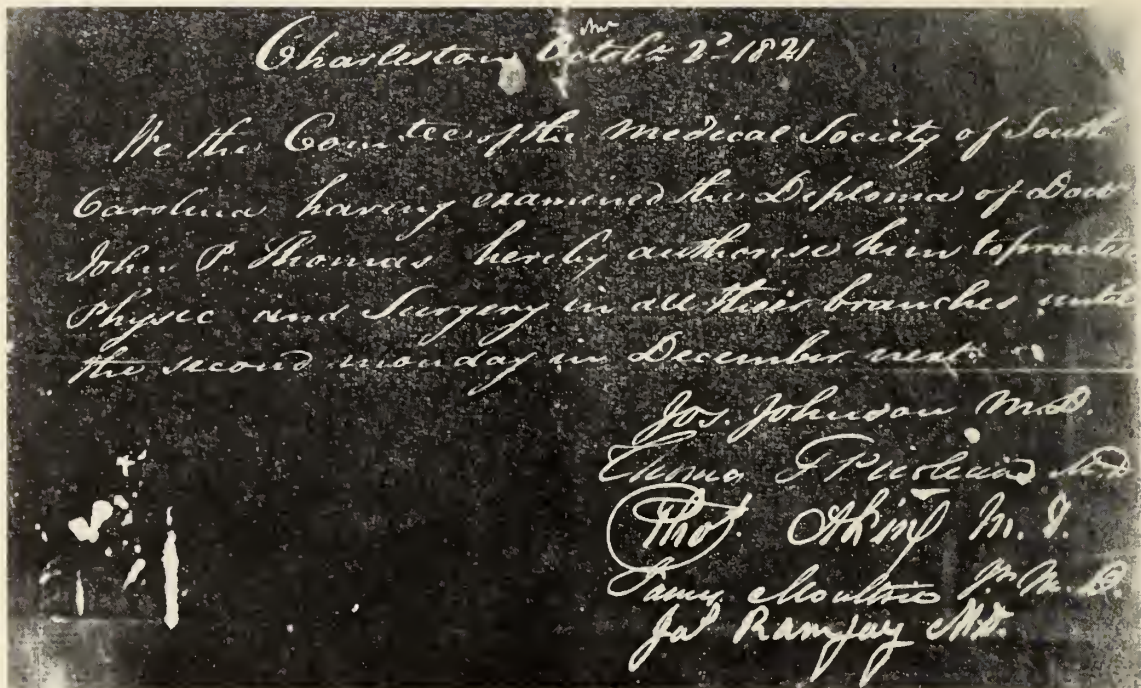
We hope that this viewpoint won't spread into our part of the country. The house call is essential to the existing happy relationship between patients and physicians in small and medium-size communities. What one wants from a doctor is not only scientific medicine but a personal relationship, the feeling that a doctor can be called upon.

No doubt the house call can be abused. Unquestionably, there are times when an adult or a child could go to a doctor's office for treatment instead of asking him to travel miles through the suburbs. But there also are times when a house call is tremendously important. When an infant's fever has run up to 105 degrees, parents don't want to take the child into the icy outdoors.

The ending of house calls would be another step in the direction of depersonalizing medicine. It is not in the interest of doctors or patients to move in that direction. While keeping the patient alive, medical men also should strive to maintain the concept of the family doctor.

*News & Courier*  
Sept. 17, 1961





*An early South Carolina License  
This license is now in the possession of Mrs. Mary Waties Pope of Newberry.*

## SOCIAL HEALTH STUDY EXPLORES TEEN-AGE SEXUAL BEHAVIOR

Taboos regarding sex, prejudicial attitudes, class biases, ignorance and apathy are some of the factors contributing to the rise of venereal disease in the United States, writes Dr. Celia Deschin, author of "Teen-Agers and Venereal Disease — A Sociological Study," report of a just-completed study of 600 teen-age patients from New York City social hygiene clinics which was released at a press conference at the Overseas Press Club in New York city recently.

Stating that "it is necessary to replace ignorance with knowledge and apathy with appropriate action if we are interested in more effective control of these diseases," Dr. Deschin, who also directed the study, stressed the need for a clarification of the role of sex in our society.

"It is one of the paradoxes of the 20th century culture in the United States," she comments, "that while interest in and concern about sex have greatly increased, knowledge about sex in the sense of understanding and relation to life has not increased appreciably." She also notes that, "Of the factors that continue to impede venereal disease control, none is more significant than the confusion that exists today with respect to standards of sexual behavior."

The study found that of the 600 patients studied, 10% had good knowledge of what venereal diseases

are or how they are transmitted. Only 42% had ever read or heard *anything* about venereal disease, and, of these, just 14% had gained any of their information from school instruction.

The majority (64%) received their sex knowledge from the peer group — parents or other adults provided information for only 21% — pornography, observation of animals or peeping accounted for the next highest group — and school or books were the source for only 13%.

The study points up the need for a comprehensive effort on the part of community agencies, school systems, churches to help give status to the life of the teen-ager. Certainly, writes Dr. Deschin, "the fact that 509 of the 600 teen-agers indicated that they did 'Nothing' in their spare time, is a serious societal problem in that these young people have an ill-defined status and few opportunities to engage in socially meaningful activities." She urges parents, teachers and professionals in health and welfare fields to overcome their apathy and bring adolescents into the main stress of community life.

In viewing the findings of the study it is only logical to infer that parents, schools, organized religion, cultural agencies as well as the teenagers themselves can be utilized in ways that have not even been tried. "At some point," Dr. Deschin insists, "The cost of transmitting ignorance has to be weighed against the cost of providing education."



# Book Reviews

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*RESUSCITATION OF THE NEWBORN INFANT.*  
Edited by Harold Abramson, M. D., C. V. Mosby  
Company, St. Louis, 1960. Price \$10.00.

This book consists of many contributions from authors concerned with the conditions of the perinatal period which necessitate resuscitation of the newborn. It contains a long bibliography and discusses the many causes which contribute to newborn distress, and as such, provides a good reference for those interested in medical teaching and good medical practice.

The obstetrician should profit most by reading this book, but it should be of interest to pediatricians and general practitioners as well. I particularly recommend chapter seven which is entitled "Obstetric Analgesia and Anesthesia" as a required subject for all who are responsible for the administration of drugs to expectant mothers. The section on resuscitation procedures in the delivery room provides essential information to all who enter this "room of life".

Obviously, much work and thought has been applied by the editor in compiling this book which is especially valuable as a reference book.

Jack W. Rhodes

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*RELIEF OF SYMPTOMS*, by Walter Modell,  
M. D., Second Edition, C. V. Mosby, Co. St. Louis,  
Mo. 1961. Pp. 354, Price \$11.50.

This is a most significant book written by a physician who has attained eminence nationally as both clinician and pharmacologist. The book is significant because, as the title indicates, it presents an aspect of patient care which, in the avid search for diagnosis and cure, is apt to be neglected in the training of medical students and house officers, and, in fact, neglected by practitioners in medicine and the specialties. The approach to modern medicine is to establish etiological diagnosis and to prescribe the specific therapy, so that an oddly contemptuous contemporary attitude exists toward the relief of symptoms per se. The author contends that the practice of good medicine is not complete without consideration of the understandable right of the patient to have relief from his symptoms, and he presents his case eloquently in the first four chapters. The remaining 27 chapters are devoted to measures currently available for relief of 27 specific symptoms. The subject matter is presented in an informal and interesting manner.

With the vast amount of today's medical literature concentrated on the diagnosis and cure of disease (and, of course, rightly so) this book is a refreshing addition to your medical library. It may be read with profit and enjoyment by medical students, house staff

members, and clinicians in every field of medicine and surgery.

H. C. R.

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*HEREDITY IN OPHTHALMOLOGY*, by Jules  
Francois. 1st Edition. The C. V. Mosby Co., St. Louis,  
1961. Pp. 698. Price \$23.00.

This book will probably become one of the classics in ophthalmology. In writing it, the author has satisfied many if not all of the criteria for a classic book. It is very readable and interesting even for a physician who is not an ophthalmologist, or one who is not particularly interested in heredity.

The book is so comprehensive that probably there is no one place outside of the voluminous original literature where one can discover so many "meaty" facts about such diseases of the eye as Marfan's Syndrome, keratoconus, etc.

The book displays breadth. It opens with general genetics, then genetics in ophthalmology and finally the diseases in which the eye findings are present only as a non-integral part of the main defect. For this reason, this book should appeal to the pediatricians and internists.

Lastly, the author is a very famous ophthalmologist who is writing about a subject on which he is the leading world authority.

W. W. Vallotton

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*INFORMATION PLEASE! FOR WOMEN ONLY*  
by Alfred Dreyfus, II. Vantage Press, Inc., N. Y.,  
1961.

Mr. Alfred Dreyfus has pulled together in his recent book, *Information, Please!* some answers to questions concerning many aspects of female hygiene and sexual disorders. In general, the information may be described as rather unorganized and rambling, though written in a breezy, informal style. In specific, it is inadequate and, in places, almost erroneous because of the irresponsible mixing of declarative, unsubstantiated statements concerning the physical, emotional, and mental aspects of the human female.

Perhaps the person who might find the book useful is the woman interested in testing the accuracy of the pregnancy predictions given in The Dunhill Chart. This is a detailed time-table of the so-called safe and unsafe periods in which pregnancy is most likely to occur.

Of interest is the fact that a civil engineer by profession and practice would select the subject of female hygiene and pregnancy as a hobby. This, no doubt, gives it some novelty value.

CB



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# STRAIN

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## THE FALLACY OF "MARKUPS"

Let me recall to your mind a series of headlines concerning fantastic "markups." One such set of headlines charged a 7000% markup *over the ingredient cost* of one Schering Corporation drug; . . . I can tell you that we at Baxter have a product with a far more astronomic markup *over the ingredient cost* than anything the (Kefauver) committee released for the front pages. One of our ingredients has a markup of more than half a million per cent—675,000% to be exact. That ingredient is water. . . . Actually, this fabulous markup gives us a sales profit of 7.1%. We are not selling the ingredient. You can get that out of a faucet. We are selling injectable distilled water which will not cause a fever when introduced into the blood stream.—William B. Graham, President, Baxter Laboratories, Inc., to the Investment Analysts Society of Chicago.

## NO FINER OPPORTUNITY

Early in the Kefauver hearings, the subcommittee invited testimony from the Arthritis and Rheumatism Foundation. There followed appalling disclosures that some \$250 million are spent each year by arthritics on useless quack cures . . . Considering the close attention of the press and public to these proceedings, never had a Congressional inquiry been handed a finer opportunity to launch a public crusade and mobilize national resources to stamp out criminal operatives in the health field. And what happened? Nothing. The investigators were far more interested in getting back to the assault on manufacturers of cortisone and its derivatives which have actually restored millions of cripples and potential cripples to useful, productive life.—*Report to the Nation*: Austin Smith, M. D., President, Pharmaceutical Manufacturers Association.

## MEDICAL EXAMINERS

The State Board of Medical Examiners has just published a very useful pamphlet containing the medical practice laws of South Carolina and a list of licensed physicians in the state.

This makes a handy source of reference and should refresh some of our forgetful minds about the legal aspect of our practices.

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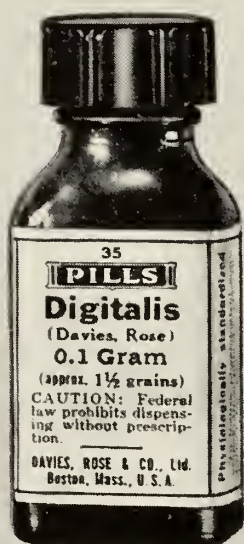


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Pinebluff Sanitarium	3-A
Pitman-Moore Company	41-A
Plough, Inc.	16-A
Professional Service, Inc.	32-A
A. H. Robins Company	6-A
Roehe Laboratories	19-A
W. B. Saunders	7-A
G. D. Searle & Company	535
Standard Brands	17-A
U. S. Brewers Assn.	13-A
The Upjohn Company	33-A
Wallace Laboratories	15-A, 31-A
Waverley Sanitarium	24-A
Westbrook Sanatorium	32-A
Winchester Surgical Supply Co.	21-A
Winthrop Laboratories	2-A, 18-A, 27-A, 35-A
World Insurance Company	40-A















